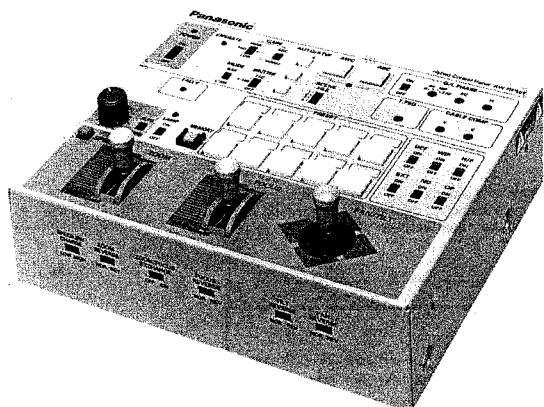


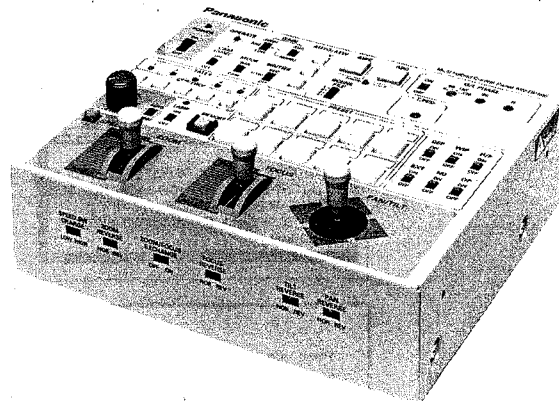
Service Manual

Hybrid Control Panel / Multi Hybrid Control Panel

AW-RP501/AW-RP505



AW-RP501



AW-RP505

SPECIFICATIONS

[AW-RP501]



Source Voltage :	12 V DC (DC jack)
Power Consumption :	12V, 0.7A
Video Input :	1.0 V[p-p] composite/75 Ω (BNC connector)
Genlock Input :	black burst
	75 Ω loop through with auto terminator (BNC connector)
Video Output :	1.0 V[p-p] composite/75 Ω x 2 (BNC connector)
S-video Output :	Y: 0.7 V[p-p] (75 Ω)
	C: 0.3 V[p-p] burst level chrominance/75 Ω (S-VIDEO connector)
Genlock Output :	75 Ω (BNC connector)
Camera Control Output :	Control signal (BNC connector)
Pan/tilt Control Output :	Control signal (RJ-45 8P modular jack)
System Tally Input :	Tally signal (2 pin Terminal block)
Auxiliary Control Input :	Control signal (8 pin DIN connector)
Switches :	Power ON/OFF Switch, GAIN HIGH/MID/LOW Switch, GAIN AGC/MANU Switch, MODE BAR/CAM switch, SHUTTER Switch, AUTO/ATW ATW switch, AUTO/ATW A switch, AUTO/ATW B switch, AWC Switch, ABC Switch, G/L PHASE ON/OFF Switch, G/L PHASE Coarse Switch, IRIS AUTO/MANU Switch, MEMORY Switch, PRESET Switch, DEF Switch, WIP Switch, H/F Switch, EXT Switch, ND Switch, OP Switch, SPEED Switch, SPEED SW CHANGE Switch, ZOOM REVERSE Switch, ZOOM/FOCUS EXCHANGE Switch, FOCUS REVERSE Switch, TILT REVERSE Switch, PAN REVERSE Switch
Controls :	T. PED Control, G/L PHASE SC Control, G/L PHASE H Control, CABLE COMP Y Control, CABLE COMP C Control, IRIS LEVEL Control, ZOOM Lever, FOCUS Lever, PAN/TILT Lever
Pan/tilt Head Connecting Cable :	x 4 (Coaxial Cable 3 pcs., 10BASE-T straight cable 1 pc.)(In case of using G/L function)
Maximum cable length :	500 m (In case of using coaxial cables 5C-2V and 10BASE-T cable UTP category-5)
Operating temperature :	-10°C to +45°C (14°F to +113°F)
Dimensions :	210 (W) x 88 (H) x 177 (D) mm [8-1/4" (W) x 3-1/2" (H) x 7" (D)]
Weight :	2.2 kg (4.9 lbs.)
Finish :	AV Ivory painting

Panasonic


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⚠ WARNING


This service information is designed for experienced repair technicians only and is not designed for use by the general public.
It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product.
Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

**CAUTION**
RISK OF ELECTRIC SHOCK
DO NOT OPEN

CAUTION:
TO REDUCE THE RISK OF ELECTRIC SHOCK,
DO NOT REMOVE COVER (OR BACK). NO USER
SERVICEABLE PARTS INSIDE.
REFER SERVICING TO QUALIFIED SERVICE
PERSONNEL.



This symbol warns the user that uninsulated voltage within the unit may have sufficient magnitude to cause electric shock. Therefore, it is dangerous to make any kind of contact with any inside part of this unit.



This symbol alerts the user that important literature concerning the operation and maintenance of this has been included. Therefore, it should be read carefully in order to avoid any problems.

IMPORTANT SAFETY NOTICE

There are special components used in this equipment which are important for safety. These parts are indicated by the "⚠" mark on the schematic diagram and the replacement parts list. It is essential that these critical parts should be replaced with manufacturer's specified parts to prevent shock, fire, or other hazards.
Do not modify the original design without permission of manufacture.

[AW-RP505]

Source Voltage :	12 V DC (DC jack)
Power Consumption :	12 V, 0.5 A
Preview Video Input :	1.0 V[p-p] composite/75Ω (BNC connector)
Genlock Input :	black burst
	75Ω loop through with auto terminator (BNC connector)
Preview Video Output :	1.0 V[p-p] composite/75Ω (BNC connector)
Genlock Output :	75Ω (BNC connector)
Camera Control Output :	Control signal (BNC connector)
Pan/tilt Control Output :	Control signal (RJ-45 8P modular jack)
System Tally Input :	Tally signal (6 pin Terminal block)
Auxiliary Control Input :	Control signal (8 pin DIN connector)
Switches :	Power ON/OFF Switch, CAM CONT Switch, GAIN HIGH/MID/LOW Switch, GAIN AGC/MANU Switch, SCENE FILE Switch, CONTROL Switch, LAMP Switch, MODE BAR/CAM Switch, SHUTTER Switch, AUTO/ATW ATW Switch, AUTO/ATW A Switch, AUTO/ATW B Switch, AWC Switch, ABC Switch, G/L PHASE ON/OFF Switch, G/L PHASE Coarse Switch, IRIS AUTO/MANU Switch, MEMORY Switch, PRESET Switch, DEF Switch, WIP Switch, H/F Switch, EXT Switch, ND Switch, OP Switch, SPEED Switch, T. PED Control, G/L PHASE SC Control, G/L PHASE H Control, IRIS LEVEL Control, ZOOM Lever, FOCUS Lever, PAN/TILT Lever
Controls :	
Multiport Hub Connecting	
Cable :	x 4 (Coaxial Cable 3 pcs., 10BASE-T straight cable 1 pc.)(In case of using G/L function)
Maximum cable length :	10 m (In case of using coaxial cables 5C-2V and 10BASE-T straight cable UTP category-5)
Operating temperature :	-10°C to +45°C (14°F to +113°F)
Dimensions :	210 (W) x 88 (H) x 177 (D) mm [8-1/4" (W) x 3-1/2" (H) x 7" (D)]
Weight :	2.2 kg (4.9 lbs.)
Finish :	AV Ivory painting

Weight and dimensions indicated are approximate.
Specifications are subject to change without notice.

ACCESSORIES

Seal	1	Mounting screws	12
Rack angle	2	M4 x 8mm	8
Connect plate.....	1	M5 x 8mm	4

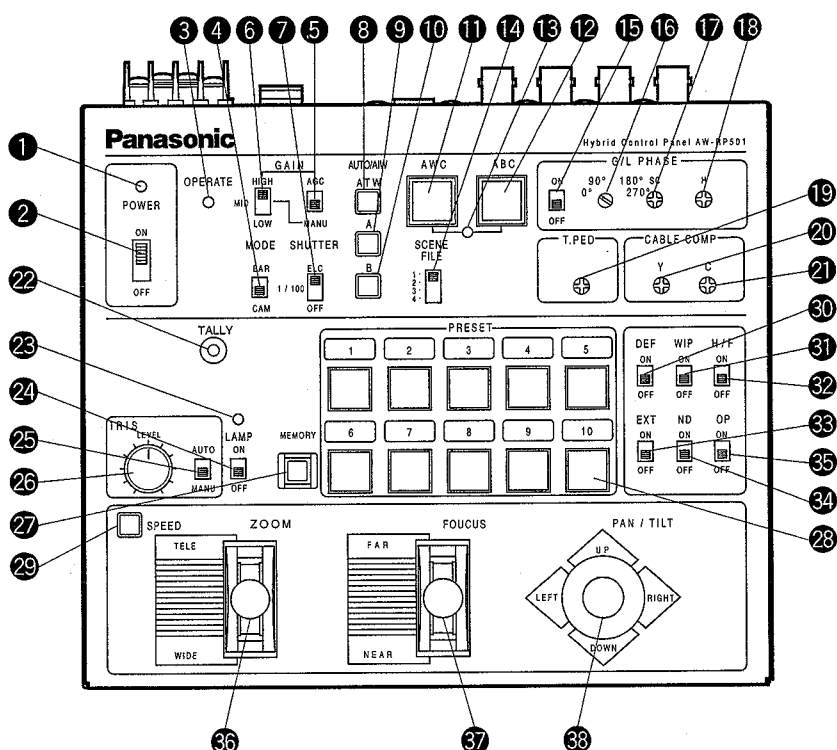
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MAJOR OPERATING CONTROLS AND THEIR FUNCTIONS

AW-RP501

■ Control Panel



1 Power Indicator [POWER]

Lights red when POWER ON/OFF Switch 2 is in the ON position, and goes out when the same switch is set to the OFF position.

2 Power Control Switch [POWER, ON/OFF]

The camera and pan/tilt head are switched on when this switch is set to the ON position. (The power indicator lights.) The camera and pan/tilt head are partially switched off when this switch is set to the OFF position.

Note: When the switch is set to the OFF position, the camera is totally switched off but the communication line between the pan/tilt head and this control panel remains live. To disconnect all power supply, pull out the power plug from the electrical outlet.

3 Operating Indicator [OPERATE]

Lights green when communication begins normally between the camera and the control panel, and goes out if a communication error occurs.

4 Mode Selection Switch [MODE, BAR/CAM]

Used to select camera color bar signals or camera video signals. With the switch set to BAR, the control panel outputs color bar signals from the video output terminal. When the switch is set to CAM, it outputs camera video signals.

5 AGC Selection Switch [GAIN, AGC/MANU]

Keep this switch in the AGC position if you want to keep automatic gain control. When this switch is at AGC, GAIN H/M/L Switch 6 is invalid.

6 High Gain Selection Switch [GAIN, HIGH/MID/LOW]

This switch is valid only when GAIN AGC/MANU Switch 5 is in the MANU position. Normally, keep it in the LOW position. When the camera is used in a dark place or when video output level is not high enough even if the iris is wide open, set the switch to the MID or HIGH position.

7 Electronic Shutter Speed Selection Switch [SHUTTER, ELC/ 1/100 /OFF]

Used to select a mode of camera electronic shutter control. With the switch in the ELC position, the electronic shutter is controlled and the camera sensitivity is automatically adjusted when using the camera in a bright place. The shutter speed is 1/100 second when the switch is in the 1/100 position. The electronic shutter is off when the switch is in the OFF position.

8 White Balance ATW Selection Switch [AUTO/ATW, ATW]

When the switch is depressed, the camera keeps automatically adjusting white balance. The switch lights when it is selected.

9 White Balance Ach Selection Switch [AUTO/ATW, A]

When this switch is depressed, white balance will be as stored in Channel A of the camera. The switch lights when it is selected. When AWC Switch 11 is pressed after selecting AUTO/ATW, A, white balance is automatically adjusted and stored in Channel A.

10 White Balance Bch Selection Switch [AUTO/ATW, B]

When this switch is depressed, white balance will be as stored in Channel B of the camera. The switch lights when it is selected. When AWC Switch 11 is pressed after selecting AUTO/ATW, B, white balance is automatically adjusted and stored in Channel B.

11 Auto White Start Switch [AWC]

If this switch is pressed when AUTO/ATW A Switch 9 or AUTO/ATW B Switch 10 is selected, white balance is automatically adjusted. The adjustment results are stored in Channel A or B. This switch is invalid if the MODE BAR/CAM Switch 4 is in the BAR position.

Auto Set Indicator 13 flashes while AWC is in operation, and goes out when white balance has been properly adjusted. Auto Set Indicator 13 remains lit if white balance adjustment fails.

Note: White balance may not be adjustable if there is no white in the image being taken by the camera. For details, refer to the Operating Instructions for the Camera.

12 Auto Black Start Switch [ABC]

When this switch is depressed, the lens iris is automatically closed to set black balance. Be sure to keep the IRIS AUTO/MANU Switch 25 in the AUTO position in setting black balance. Auto Set Indicator 13 flashes while ABC is in operation, and goes out when black balance has been properly adjusted. Auto Set Indicator 13 remains lit if black balance adjustment fails. Black balance adjustment may fail if the total pedestal is too low. In such a case, adjust the total pedestal with T.PED Control 19 (referring to the OPERATING PROCEDURES at page 25) and try to adjust black balance again.

13 Auto Set Indicator

This LED flashes during white balance or black balance adjustment with AWC Switch 11 or ABC Switch 12 depressed, and goes out when the adjustment has ended normally. The LED remains lit if balance adjustment fails.

14 Scene File Selection Switch [SCENE FILE, 1/2/3/4]

Select a scene file preset on the camera side. Remember, however, that [4] is camera scene file USER A or USER B (provided that WV-E550 or AW-E560 is connected).

15 Genlock Phase Control Switch [G/L PHASE, ON/OFF]

Used to adjust the genlock phase in operating the camera in external sync mode. Set the switch to the ON position only when adjusting the genlock subcarrier phase or genlock horizontal phase. Otherwise, keep the switch in the OFF position.

16 Genlock Subcarrier Phase Coarse Switch [G/L PHASE, 0°/90°/180°/270°]

Used for coarse adjustment of the color phases of genlock input and video output signals in operating the camera in external sync mode. Used in combination with G/L PHASE SC Control 17, the switch has an adjustment range of over 360°. Set G/L PHASE ON/OFF Switch 15 to the ON position before adjusting the color phases with this switch.

17 Genlock Subcarrier Phase Fine Control [G/L PHASE, SC]

Used for fine adjustment of the color phases of genlock input and video output signals in operating the camera in external sync mode. Use this switch in combination with G/L PHASE Coarse Switch 16. Set G/L PHASE ON/OFF Switch 15 to the ON position before adjusting the color phases with this switch.

18 G/L Horizontal Phase Adjustment Control [G/L PHASE, H]

Used to adjust the horizontal phases of genlock input and video output signals in operating the camera in external sync mode. Set G/L PHASE ON/OFF Switch 15 to the ON position before adjusting the horizontal phases with this switch.

19 Total Pedestal Level Control [T. PED]

The set pedestal level of the camera's Y (luminance) signal can be adjusted. This control is used in a system of two or more cameras to adjust the pedestal levels of these cameras. The control may operate not continuously sometimes due to digital signal processing.

20 Cable Compensation Luminance Control [CABLE COMP, Y]

Used to adjust the Y (luminance) signal level of video output signals as appropriate to the cable length between the pan/tilt head and this control panel. To adjust it, first set MODE BAR/CAM Switch 4 to the BAR position, then connect a waveform monitor, vectorscope, or other measuring instrument to the video signal output. If the cable between the pan/tilt head and this control panel is longer than 300 meters, set the cable compensation switch on the pan/tilt head to the ON position in advance. (For details, refer to the OPERATING PROCEDURES at page 25 or to the Operating Instructions for the Pan/tilt Head.) First, adjust the Y (luminance) signal level with this control, then adjust the C (chrominance) signal level with CABLE COMP C Control 21. Repeat this until the video output level of this control panel matches the camera output level.

Turning this control changes not only the Y (luminance) signal level but also the whole video signal level.

21 Cable Compensation Chrominance Control [CABLE COMP, C]

Used to adjust the C (chrominance) signal level of video output signals as appropriate to the cable length between the pan/tilt head and this control panel. To adjust it, first set MODE BAR/CAM Switch 4 to the BAR position, then connect a waveform monitor, vectorscope, or other measuring instrument to the video signal output. If the cable between the pan/tilt head and this control panel is longer than 300 meters, set the cable compensation switch on the rotary head to the ON position in advance. (For details, refer to the OPERATING PROCEDURES at page 25 or to the Operating Instructions for the Pan/ Tilt Head.) First, adjust the Y (luminance) signal level with CABLE COMP Y Control 20, then adjust the C (chrominance) signal level with this control. Repeat this until the video output level of this control panel matches the camera output level.

22 Tally Indicator [TALLY]

Lights red when a tally signal is input to TALLY Terminal 39 from a Special Effect Generator (SEG) or video switcher.

23 Lamp Indicator [LAMP]

Lights red when LAMP ON/OFF Switch 24 is in the ON position. Flashes if the lamp connected to the AC Adapter (AW-PS300) for pan/tilt head is broken. Goes out when LAMP ON/OFF Switch 24 is set to the OFF position.

Note: Use a halogen lamp of 250 W to 500 W to connect to the Pan/tilt Head AC Adapter (AW-PS300). If a lamp of lower than 250 W is connected to it, the LED may flash when LAMP ON/OFF Switch 24 is in the ON position even though the lamp is not broken.

24 Lamp Switch [LAMP, ON/OFF]

Switches on and off the halogen lamp connected to the lamp AC receptacle of the Pan/tilt Head AC Adapter (AW-PS300). Set it to the ON position to switch the halogen lamp on (in which case, the lamp LED flashes). Set it to the OFF position to switch the halogen lamp off.

25 Lens Iris Selection Switch [IRIS, AUTO/MANU]

When this switch is in the AUTO position, the lens iris is automatically controlled according to the quantity of light entering the lens. When the switch is in the MANU position, the iris can be manually controlled over the range from the closed position to the fully open position using IRIS LEVEL Control 26.

Set the switch to the MANU position in storing iris data in PRESET Switches 28 with MEMORY Switch 27. If the switch is in the AUTO position, iris data will not be stored in the memory.

26 Lens Iris Control [IRIS, LEVEL]

When IRIS AUTO/MANU Switch 25 is in the MANU position, the iris can be controlled over the range from the closed position to the fully open position using this control. Turning it clockwise opens the iris and turning it counterclockwise closes the iris.

If the camera is preset to AUTO IRIS ADJ ON when IRIS AUTO/MANU Switch 25 is in the AUTO position, this control may be used for fine adjustment of ALC focus level. For details, refer to the Operating Instructions for the Camera.

If the preset memory is called by pressing PRESET Switches 28 when IRIS AUTO/MANU Switch 25 is in the MANU position, the iris is adjusted to the preset value stored in the memory regardless of the position of this control. If the control is turned after that, the iris is adjusted corresponding to the position of the control.

27 Preset Memory Switch [MEMORY]

Head pan/tilt positions, lens zoom/focus/iris (provided that IRIS AUTO/MANU Switch 25 is in the MANU position), and camera white balance (ATW Channel A or B) can be preset in up to 10 memory buttons.

To preset them in these buttons, first select a head pan/tilt position, lens zoom/focus/iris, or camera white balance (ATW or Channel A or B); press MEMORY Switch 27 (so it lights yellow green and all the 10 buttons of PRESET Switches 28 flash); while keeping the MEMORY Switch 27 depressed, press one of the 10 buttons of PRESET Switch 28 as desired. The pressed button in which the selected item is stored lights.

28 Preset Position Selection Switches [PRESET]

The head pan/tilt positions, lens zoom/focus/iris, and camera white balance that are stored in the buttons of PRESET Switch 28 can be recalled to operate the pan/tilt head, the lens, and the camera according to the preset data.

To preset them in the PRESET switches, first select a head pan/tilt position, lens zoom/focus/iris, or camera white balance (ATW or Channel A or B); press the MEMORY Switch 27 (so it lights yellow green and all the 10 buttons of PRESET Switches 28 flash); at the same time press one of the 10 buttons of PRESET Switches 28 as desired. The pressed button in which the selected item is stored lights.

29 Speed Selection Switch [SPEED]

If ZOOM lever 36, FOCUS Lever 37, or PAN/TILT Lever 38 is moved while keeping SPEED Switch 29 depressed, the corresponding operation takes place at low speed, provided that SPEED SW CHANGE Switch 50 is in the LOW position. If one of these levers is moved with SPEED Switch 29 depressed when SPEED SW CHANGE Switch 50 is in the HIGH position, the corresponding operation takes place at high speed. SPEED Switch 29 remains lit while it is kept depressed.

30 Defroster Switch [DEF, ON/OFF]

If this switch is connected to a pan/tilt head with a built-in defroster function, it switches on and off the defroster.

31 Wiper Switch [WIP, ON/OFF]

If this switch is connected to a pan/tilt head with a built-in wiper function, it switches on and off the wiper.

32 Heater/Fan Switch [H/F, ON/OFF]

If this switch is connected to a pan/tilt head with a built-in heater or fan function, it switches on and off the heater or fan.

33 Lens Extender Switch [EXT, ON/OFF]

If this switch is connected to a lens with a built-in extender function, it switches on and off the lens extender. For details, refer to the Operating Instructions for the Lenses and Pan/tilt Head.

34 ND Filter Switch [ND, ON/OFF]

If this switch is connected to a lens with a built-in ND filter function, it switches on and off the ND filter. For details, refer to the Operating Instructions for the Lenses and Pan/tilt Head.

35 Option Switch [OP, ON/OFF]

Controls the option switch terminal on the Pan/tilt Head AC Adapter (AW-PS300) to short circuit or open it. That is, the option switch terminal is shorted when OP ON/OFF Switch 35 is in the ON position, or is opened when it is in the OFF position. For details, refer to the Operating Instructions for the Pan/tilt Head AC Adapter.

36 Zoom Lever [ZOOM, TELE/WIDE]

Controls the lens zoom. Zoom speed varies according to the angle of the lever. The lens moves toward TELE when the lever is moved toward TELE, or toward WIDE when the lever is moved toward WIDE, provided that ZOOM REVERSE Switch 51 is in the NOR position. When ZOOM REVERSE Switch 51 is set to the REV position, the lens moves in the opposite direction. ZOOM/FOCUS EXCHANGE Switch 52 may be used to exchange its function with FOCUS Lever 37.

37 Focus Lever [FOCUS FAR/NEAR]

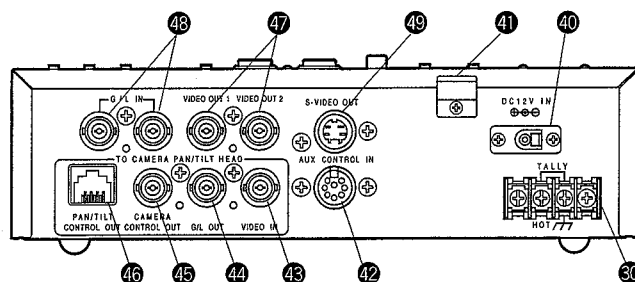
Used to adjust the lens focus at varying speed depending on the angle of the lever. The lens is focused far when the lever is moved toward FAR, or near when the lever is moved toward NEAR, provided that FOCUS REVERSE Switch 53 is in the NOR position. When FOCUS REVERSE Switch 53 is set to the REV position, the lens focus operates in the opposite direction. ZOOM/FOCUS EXCHANGE Switch 52 may be used to exchange its function with ZOOM Lever 36.

38 Pan/tilt Lever [PAN/TILT, UP/DOWN/LEFT/RIGHT]

Controls the head's pan/tilt operation at varying speed depending on the angle of the lever. The pan/tilt head turns up when the lever is moved toward UP, or down when it is moved toward DOWN, provided that TILT REVERSE Switch 54 is in the NOR position. The pan/tilt head moves in the opposite direction if the TILT REVERSE Switch 54 is in the REV position. The pan/tilt head turns leftward when the lever is moved toward LEFT, or rightward when it is moved toward RIGHT, provided that PAN REVERSE Switch 55 is in the NOR position. The pan/tilt head moves in the opposite direction if the PAN REVERSE Switch 55 is in the REV position.

Note: TILT REVERSE Switch 54 and PAN REVERSE Switch 55 may be used to reverse the operating direction of the pan/tilt head, but be sure to set the operating direction of the pan/tilt head with its mounting direction selection switch during its installation depending on whether the pan/tilt head is mounted on the floor or is suspended. Unless the mounting direction selection switch on the pan/tilt head is properly set, the pan/tilt head will pan or tilt in the opposite direction and the pan/tilt head operation limiters will not be properly stored in the memory. For details on the setting of this switch, refer to INSTALLATION OF PAN/TILT HEAD at page 18 or the Operating Instructions for the Pan/tilt Head.

REAR PANEL



39 TALLY Input Terminal [TALLY] (2-pin Terminal Board)

Connect it to the tally connector on a special effect generator (SEG) or a video switcher, for example. When [HOT] terminal falls to ground level, TALLY Indicator 22 and the tally indicator on the Pan/tilt Head (AW-PH300) light red.

40 12V DC Input Connector [DC 12V IN] (DC Jack)

Connect the AC Adaptor AW-PS301 (optional).

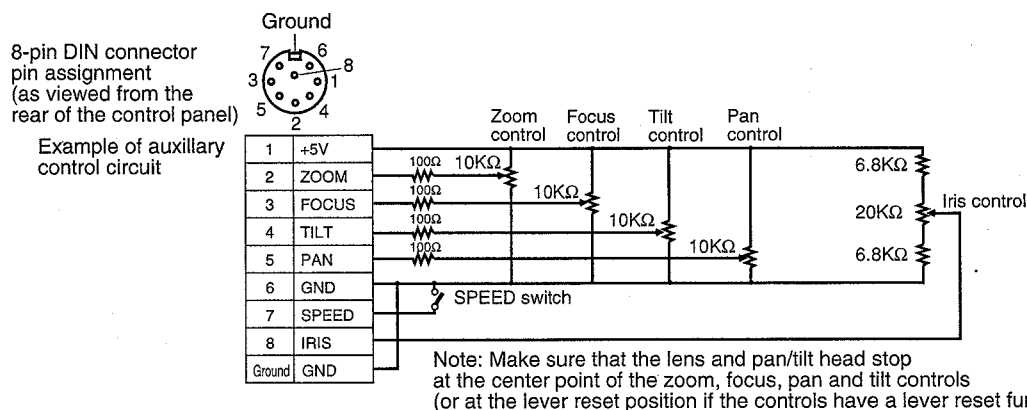
41 Cord Clamp (Clamper)

Clamps the DC cord of the AC Adaptor AW-PS301 (optional) connected to DC 12V IN Connector 40 to prevent its disconnection.

42 Auxiliary Control Input Connector [AUX CONTROL IN] (8-pin DIN Connector)

External control signals are input to this connector in controlling the head's pan/tilt, lens zoom, focus and iris operations.

Note: In externally controlling the pan/tilt head and lens through this connector, set IRIS LEVEL Control 25 on this control panel to the center point (straight up), and do not simultaneously operate SPEED Switch 29, ZOOM Lever 36, FOCUS Lever 37, and PAN/TILT Lever 38. Operation errors may occur if external controls are simultaneously used.



43 VIDEO Input T Connector [TO CAMERA PAN/TILT HEAD, VIDEO IN] (BNC Connector)

Connect it to the video output connector [VIDEO OUT] on the pan/tilt head with a coaxial cable (5C-2V or equivalent), which may be extended up to 500 meters.

44 Genlock Output Connector [TO CAMERA PAN/TILT HEAD, G/L OUT] (BNC Connector)

Connect it to the G/L input connector [G/L IN] on the pan/tilt head with a coaxial cable (5C-2V or equivalent) in operating the camera in external sync mode. The cable can be extended up to 500 meters.

45 Camera Control Output Connector [TO CAMERA, PAN/TILT HEAD CAMERA CONTROL OUT] (BNC Connector)

Connect it to camera control input connector [CAMERA CONTROL IN] on the pan/tilt head with a coaxial cable (5C-2V or equivalent), which may be extended up to 500 meters.

46 Pan/tilt Control Output Connector [TO CAMERA PAN/TILT HEAD, PAN/TILT CONTROL OUT] (RJ-45 8-pin Modular Jack)

Connect it to pan/tilt control output connector [P/T CONTROL IN] on the pan/tilt head with a 10BASE-T straight cable (UTP category 5 or equivalent), which may be extended up to 500 meters.

47 Video Output Connectors
[VIDEO OUT 1, VIDEO OUT 2]
(BNC Connector)

Video signals adjusted by the cable compensation circuit according to the cable length from the rotary head to the control panel are output. There are two output connectors to be connected to a monitor, special effect generator (SEG), VCR, or other video input devices with coaxial cables.

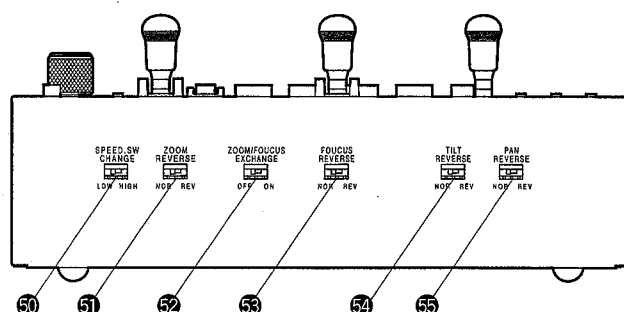
48 Genlock Input Connectors
[G/L IN] (BNC Connector)

Black burst signals are input to one of the two connectors in operating the camera in external sync mode. The two connectors are automatically terminated, so input the above signals to one of them and use the other as a loop-through output.

49 S-Video Output Connector
[S-VIDEO OUT] (4-pin S-Connector)

Y (luminance) and C (chrominance) signals are output. Connect it to the S-video input on a monitor or S-VHS VCR, for example.

■ **Front Panel**



50 Speed Switch Changing Switch
[SPEED SW CHANGE, LOW/HIGH]

Changes the polarity of SPEED Switch 29. If ZOOM lever 36, FOCUS Lever 37, or PAN/TILT Lever 38 is moved while keeping SPEED Switch 29 depressed, the corresponding operation takes place at low speed, provided that SPEED SW CHANGE Switch 50 is in the LOW position. If one of these levers is moved with SPEED Switch 29 depressed when SPEED SW CHANGE Switch 50 is in the HIGH position, the corresponding operation takes place at high speed.

The speed polarity can also be changed by pressing SPEED Switch 29 while keeping MEMORY Switch 27 depressed. When this step is taken again, the original speed polarity is restored. Take this step if it is difficult to shift SPEED SW CHANGE Switch 50 because this control panel is mounted on a console or the like.

51 Zoom Reverse Switch
[ZOOM REVERSE, NORM/REV]

Changes the operating direction of ZOOM Lever 36. The lens zoom moves toward TELE when ZOOM Lever 36 is moved toward TELE, or toward WIDE when it is moved toward WIDE, provided that ZOOM REVERSE Switch 51 is in the NORM position. When ZOOM REVERSE Switch 51 is set to the REV position, lens zoom operation takes place in the opposite direction. With ZOOM REVERSE Switch 51 in the REV position, the operating directions shown on the panel are reversed. In this case, paste the supplied seal on the panel.

52 Zoom/Focus Exchange Switch
[ZOOM/FOCUS EXCHANGE, ON/OFF]

ZOOM Lever 36 and FOCUS Lever 37 exchange their function between them when this switch is set to the ON position. Unless this exchange is needed, keep the switch in the OFF position.

With ZOOM/FOCUS EXCHANGE Switch 52 in the ON position, the operations shown on the panel do not agree with the indications on the panel. In this case, paste the supplied seal on the panel.

53 Focus Reverse Switch

[FOCUS REVERSE, NOR/REV]

Changes the operating direction of FOCUS Lever 37. The lens is focused far when FOCUS Lever 37 is moved toward FAR, or near when the lever is moved toward NEAR, provided that FOCUS REVERSE Switch 53 is in the NOR position. When FOCUS REVERSE Switch 53 is set to the REV position, the lens focus operates in the opposite direction.

With FOCUS REVERSE Switch 53 in the REV position, the operating directions shown on the panel are opposite to the indications on the panel. In this case, paste the supplied seal on the panel.

54 Tilt Reverse Switch

[TILT REVERSE, NOR/REV]

Changes the tilt direction controlled by PAN/TILT Lever 38. The pan/tilt head turns up when PAN/TILT Lever 38 is moved toward UP, or down when it is moved toward DOWN, provided that TILT REVERSE Switch 54 is in the NOR position. The pan/tilt head moves in the opposite direction if the TILT REVERSE Switch 54 is in the REV position.

With TILT REVERSE Switch 54 in the REV position, the operating directions shown on the panel are opposite to the indications on the panel. In this case, paste the supplied seal on the panel.

55 Pan Reverse Switch

[PAN REVERSE, NOR/REV]

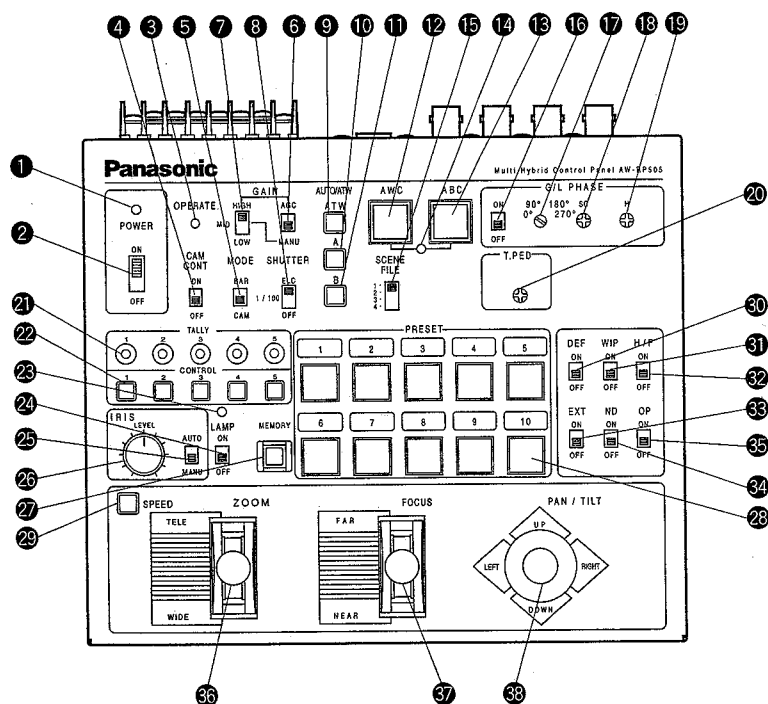
Changes the pan direction controlled by PAN/TILT Lever 38. The pan/tilt head turns leftward when PAN/TILT Lever 38 is moved toward LEFT, or rightward if it moved toward RIGHT. The rotary head turns in the opposite direction if the PAN REVERSE Switch 55 is in the REV position, provided that PAN REVERSE Switch 55 is in the NOR position. When PAN REVERSE Switch 55 is set to the REV position, the pan/tilt head turns in the opposite directions.

With PAN REVERSE Switch 55 in the REV position, the operating directions shown on the panel are opposite to the indications on the panel. In this case, paste the supplied seal on the panel.

Note: TILT REVERSE Switch 54 and PAN REVERSE Switch 55 may be used to reverse the operating direction of the pan/tilt head, but be sure to set the operating direction of the pan/tilt head with its mounting direction selection switch during its installation depending on whether the pan/tilt head is mounted on the floor or is suspended. Unless the mounting direction selection switch on the pan/tilt head is properly set, the pan/tilt head will pan or tilt in the opposite direction and the pan/tilt head operation limiters will not be properly stored in the memory. For details on the setting of this switch, refer to the INSTALLATION OF PAN/TILT HEAD in the Operating Instructions for the Pan/tilt Head.

AW-RP505

Control Panel



Note: To control the cameras and pan/tilt head, the power switch on the Multiport Hub must be in the ON position. Only the camera and pan/tilt head selected with CONTROL Switch 22 can be set and controlled. First, select a camera with CONTROL Switch 22 set CAM CONT Switch 4 to the ON position, and make the necessary settings. After setting the camera, set CAM CONT Switch 4 back to the OFF position.

① Power Indicator [POWER]

Lights red when POWER ON/OFF Switch ② is in the ON position, and goes out when the same switch is set to the OFF position.

② Power CONTROL Switch [POWER, ON/OFF]

All the connected cameras and pan/tilt heads are switched on when this switch is set to the ON position. (The power indicator lights.) The camera and pan/tilt head are partially switched off when this switch is set to the OFF position.

Note: When the switch is set to the OFF position, the camera is totally switched off but the communication line between the pan/tilt head and this control panel remains live. To disconnect all power supply, pull out the power plug from the electrical outlet.

③ Operating Indicator [OPERATE]

Lights green when communication begins normally between the camera and the control panel, and goes out if a communication error occurs.

④ Camera Control Switch [CAM CONT, ON/OFF]

Before making camera settings, select a camera with CONTROL Switch ② then set CAM CONT Switch ④ to the ON position. After making the necessary settings, set CAM CON Switch ④ back to the OFF position.

Note: At the same time as CAM CONT Switch ④ is set to the ON position, all the switch settings of this control panel are sent to the selected camera to update its settings. Do not shift CAM CONT Switch ④ to the ON position except when changing the camera settings. If a different camera is selected with CONTROL Switch ② when CAM CONT Switch ④ is in the ON position, the settings of the newly selected camera will also be changed. Before selecting another camera with CONTROL Switch ②, be sure to set CAM CONT Switch ④ back to the OFF position.

⑤ Mode Selection Switch [MODE, BAR/CAM]

Used to select camera color bar signals or camera video signals. Select a camera with CONTROL Switch ②, set CAM CONT Switch ④ to the ON position, then select the desired type of signal with this switch. With the switch set to BAR, the control panel outputs color bar signals from the video output terminal. When the switch is set to CAM, it outputs camera video signals. After selecting it, set CAM CONT Switch ④ back to the OFF position.

⑥ AGC Selection Switch [GAIN, AGC/MANU]

Keep this switch in the AGC position if you want to keep automatic gain control. Select a camera with CONTROL Switch ②, set CAM CONT Switch ④ to the ON position, then select AGC or MANU as necessary.

When this switch is at AGC GAIN H/M/L switch ⑦ is invalid. After selecting it, set CAM CONT Switch ④ back to the OFF position.

⑦ Gain Selection Switch [GAIN, HIGH/MID/LOW]

This switch is valid only when GAIN AGC/MANU Switch ⑥ is in the MANU position. Select a camera with CONTROL Switch ②, set CAM CONT Switch ④ to the ON position, then select HIGH, MID, or LOW. Normally, keep it in the LOW position. When the camera is used in a dark place or when video output level is not high enough even if the iris is wide open, set the switch to the MID or HIGH position. After selecting it, set CAM CONT Switch ④ back to the OFF position.

⑧ Electronic Shutter Speed Selection Switch [SHUTTER, ELC/ 1/100 /OFF]

Used to select a mode of camera electronic shutter control. Select a camera with CONTROL Switch ②, set CAM CONT Switch ④ to the ON position, then select ELC, 1/100, or OFF. With the switch in the ELC position, the electronic shutter is controlled and the camera sensitivity is automatically adjusted when using the camera in a bright place. The shutter speed is 1/100 second when the switch is in the 1/100 position. The electronic shutter is off when the switch is in the OFF position. After selecting it, set CAM CONT Switch ④ back to the OFF position.

⑨ White Balance ATW Selection Switch [AUTO/ATW, ATW]

When this switch is depressed, the camera selected with CONTROL Switch ② keeps automatically adjusting white balance. The switch lights when it is selected.

⑩ White Balance Ach Selection Switch [AUTO/ATW, A]

When this switch is pressed, white balance will be as stored in Channel A of the camera selected with CONTROL Switch ②. The switch lights when it is selected. When AWC switch ⑫ is pressed after selecting AUTO/ATW, A, white balance is automatically adjusted and stored in Channel A.

⑪ White Balance Bch Selection Switch [AUTO/ATW, B]

When this switch is depressed, white balance will be as stored in Channel B of the camera selected with CONTROL Switch ②. The switch lights when it is selected. When AWC switch ⑫ is pressed after selecting AUTO/ATW, B, white balance is automatically adjusted and stored in Channel B.

12 Auto White Start Switch [AWC]

If this switch is pressed when AUTO/ATW A Switch 10 or AUTO/ATW B Switch 11 is selected, white balance is automatically adjusted on the camera selected with CONTROL Switch 22. The adjustment results are stored in Channel A or B. This switch is invalid if the MODE BAR/CAM switch 5 is in the BAR position. Auto Set Indicator 14 flashes while AWC is in operation, and goes out when white balance has been properly adjusted. Auto Set Indicator 14 remains lit if white balance adjustment fails.

Note: White balance may not be adjustable if there is no white in the image being taken by the camera. For details, refer to the Operating Instructions for the Camera.

13 Auto Black Start Switch [ABC]

When this switch is depressed, the lens iris is automatically closed to set black balance on the camera selected with CONTROL Switch 22. Be sure to keep the IRIS AUTO/MANU switch 25 in the AUTO position in setting black balance. Auto Set Indicator 14 flashes while ABC is in operation, and goes out when black balance has been properly adjusted. Auto Set Indicator 14 remains lit if black balance adjustment fails. Black balance adjustment may fail if the total pedestal is too low. In such a case, adjust the total pedestal with T.PED Control 20.

14 Auto Set Indicator

This LED flashes during white balance or black balance adjustment with AWC Switch 12 or ABC Switch 13 depressed, and goes out when the adjustment has ended normally. The LED remains lit if balance adjustment fails.

15 Scene File Selection Switch [SCENE FILE, 1/2/3/4]

Select a scene file preset on the camera side. Remember, however, that [4] is camera scene file USER A or USER B (provided that or AW-E560 is connected).

16 Genlock Phase Control Switch [G/L PHASE, ON/OFF]

Used to adjust the genlock phase in operating the camera in external sync mode. Select a camera with CONTROL Switch 22, set CAM CONT Switch 4 to the ON position, then set G/L PHASE Switch 16 to the ON position. After G/L phase setting, set CAM CONT Switch 4 and G/L PHASE Switch 16 back to the OFF position.

Note: If G/L PHASE Switch 16 is set to the ON position when CAM CONT Switch 4 is at ON, the genlock phase setting data of this control panel is sent to the camera to update its genlock phase settings.

Do not shift G/L PHASE Switch 16 to the ON position except when changing the camera genlock phase settings. If a different camera is selected with CONTROL Switch 22 when both CAM CONT Switch 4 and G/L PHASE Switch 16 are in the ON position, the genlock phase settings of the newly selected camera will be similarly changed. Before changing the camera for another, set G/L PHASE Switch 16 back to the OFF position.

17 Genlock Subcarrier Phase Coarse Switch [G/L PHASE, 0°/90°/180°/270°]

Used for coarse adjustment of the color phases of genlock input and video output signals in operating the camera in external sync mode.

Used in combination with G/L PHASE SC Control 18, the switch has an adjustment range of over 360°. Before making an adjustment, set CAM CONT Switch 4 and G/L PHASE Switch 16 to the ON position. After the adjustment, set both CAM CONT Switch 4 and G/L PHASE Switch 16 back to the OFF position.

18 Genlock Subcarrier Phase Fine Control [G/L PHASE, SC]

Used for fine adjustment of the color phases of genlock input and video output signals in operating the camera in external sync mode. Use this switch in combination with G/L PHASE Coarse Switch 17. Before making an adjustment, set CAM CONT Switch 4 and G/L PHASE Switch 16 to the ON position. After the adjustment, set both CAM CONT Switch 4 and G/L PHASE Switch 16 back to the OFF position.

19 G/L Horizontal Phase Adjustment Control [G/L PHASE, H]

Used to adjust the horizontal phases of genlock input and video output signals in operating the camera in external sync mode.

Before making a horizontal phase adjustment, set CAM CONT Switch 4 and G/L PHASE Switch 16 to the ON position.

20 Total Pedestal Level Control [T.PED]

The set pedestal level of the camera's Y (luminance) signal can be adjusted. This control is used in a system of two or more cameras to adjust the pedestal levels of these cameras. Select a camera with CONTROL Switch 22, set CAM CONT Switch 4 to the ON position, then adjust the total pedestal level with T.PED Control 20. The control may operate not continuous sometimes due to digital signal processing. After the adjustment, set CAM CONT Switch 4 back to the OFF position.

21 Tally Indicator [TALLY]

When a tally signal is input from a special effect generator (SEG) or video switcher, for example, to any of the jacks [1] to [5] of TALLY Terminal ③, the corresponding LED lights red.

22 Camera/Pan/tilt Head Selection Switch [CONTROL]

Select a desired camera with pan/tilt head from among those connected to the control panel. When a camera with pan/tilt head is selected by pressing one of the buttons [1] to [5], the pressed button lights.

Note: Even if an unconnected camera with pan/tilt head is selected by pressing the corresponding button, the button lights.

23 Lamp Indicator [LAMP]

Lights red when LAMP ON/OFF Switch ④ is in the ON position. Flashes if the lamp connected to the AC adaptor (AW-PS300) for the pan/tilt head selected with CONTROL Switch ② is broken. Goes out when LAMP ON/OFF Switch ④ is set to the OFF position.

Caution: In connecting a halogen lamp to the Pan/tilt Head AC Adaptor (AW-PS300), make sure that it is in the wattage range of 250 to 500W. If a halogen lamp less than 250W is used, the LED may flash when LAMP ON/OFF Switch ④ is in the on position even if the lamp is normal.

24 Lamp Switch [LAMP, ON/OFF]

Switches on and off the halogen lamp connected to the lamp AC receptacle of the pan/tilt head AC adaptor (AW-PS300). Select a pan/tilt head with CONTROL Switch ②, then switch the halogen lamp on or off as necessary. Set it to the ON position to switch the halogen lamp on (in which case, the lamp Indicator flashes). Set it to the OFF position to switch the halogen lamp off.

Note: When a pan/tilt head is selected with CONTROL Switch ②, the halogen lamp connected to the AC adaptor for the pan/tilt head selected with that switch lights or goes out depending on the position of LAMP ON/OFF Switch ④.

25 Lens Iris Selection Switch [IRIS, AUTO/MANU]

Used to select AUTO or MANU mode in adjusting the lens iris connected to the selected camera and pan/tilt head. When this switch is in the AUTO position, the lens iris is automatically controlled according to the quantity of light entering the lens. When the switch is in the MANU position, the iris can be manually controlled over the range from the closed position to the fully open position using IRIS LEVEL Control ⑥.

Set the switch to the MANU position in storing iris data in PRESET Switch ⑧ with MEMORY Switch ⑦. If the switch is in the AUTO position, iris data will not be stored in the memory.

26 Lens Iris Control [IRIS, LEVEL]

When IRIS AUTO/MANU Switch ⑤ is in the MANU position, the iris can be controlled over the range from the closed position to the fully open position using this control. Turning it clockwise opens the iris and turning it counterclockwise closes the iris.

If the camera is preset to AUTO IRIS ADJ ON when IRIS AUTO/MANU Switch ⑤ is in the AUTO position, this control may be used for fine adjustment of ALC focus level. For details, refer to the Operating Instructions for the Camera.

If the preset memory is called by pressing PRESET Switch ⑨ when IRIS AUTO/MANU Switch ⑤ is in the MANU position, the iris is adjusted to the preset value stored in the memory regardless of the position of this control. If the control is turned after that, the iris is adjusted corresponding to the position of the control.

27 Preset Memory Switch [MEMORY]

Head pan/tilt positions, lens zoom/focus/iris (provided that IRIS AUTO/MANU Switch ⑤ is in the MANU position), and camera white balance (ATW, Channel A or B) can be preset in up to 10 memory buttons per pan/tilt head.

To preset them in these buttons, first select a camera and pan/tilt head with CONTROL Switch ②, then select a head pan/tilt position, lens zoom/focus/iris, or camera white balance (ATW Channel A or B); press MEMORY Switch ⑦ (so it lights yellow green and all the 10 buttons of PRESET Switch ⑧ flash); while keeping the MEMORY Switch ⑦ depressed, press one of the 10 buttons of PRESET Switch ⑧ as desired.

The pressed button in which the selected item is stored lights.

28 Preset Position Selection Switch [PRESET]

The head pan/tilt positions, lens zoom/focus/iris, and camera white balance that are stored in the buttons of PRESET Switch ⑧ can be recalled to operate the pan/tilt head, the lens, and the camera according to the preset data.

To preset them in the PRESET switches, first select a camera and pan/tilt head with CONTROL Switch ②, then select a head pan/tilt position, lens zoom/focus/iris, or camera white balance (ATW Channel A or B); press the MEMORY Switch ⑦ (so it lights yellow green and all the 10 buttons of PRESET Switch ⑧ flash); at the same time press one of the 10 buttons of PRESET Switch ⑧ as desired. The pressed button in which the selected item is stored lights.

29 Speed Selection Switch [SPEED]

If ZOOM lever 36, FOCUS Lever 37, or PAN/TILT Lever 38 is moved while keeping SPEED Switch 29 depressed, the corresponding operation takes place at low speed, provided that SPEED SW CHANGE Switch 49 is in the LOW position. If one of these levers is moved with SPEED Switch 29 depressed when SPEED SW CHANGE Switch 49 is in the HIGH position, the corresponding operation takes place at high speed. SPEED Switch 29 remains lit while it is kept depressed.

30 Defroster Switch [DEF, ON/OFF]

If this switch is connected to a pan/tilt head with a built-in defroster function, it switches on and off the defroster.

Note: At the same time as a pan/tilt head is selected with CONTROL Switch 22, the defroster of the selected pan/tilt head is switched on or off depending on the position of DEF ON/OFF Switch 30.

31 Wiper Switch [WIP, ON/OFF]

If this switch is connected to a pan/tilt head with a built-in wiper function, it switches on and off the wiper.

Note: At the same time as a pan/tilt head is selected with CONTROL Switch 22, the wiper of the selected pan/tilt head is switched on or off depending on the position of WIPE ON/OFF Switch 31.

32 Heater/Fan Switch [H/F, ON/OFF]

If this switch is connected to a pan/tilt head with a built-in heater or fan function, it switches on and off the heater or fan.

Note: At the same time as a pan/tilt head is selected with CONTROL Switch 22, the heater or fan of the selected pan/tilt head is switched on or off depending on the position of H/F ON/OFF Switch 32.

33 Lens Extender Switch [EXT, ON/OFF]

If this switch is connected to a lens with a built-in extender function, it switches on and off the lens extender. For details, refer to the Operating Instructions for the Lenses and Pan/tilt Head.

Note: At the same time as a pan/tilt head is selected with CONTROL Switch 22, the lens extender of the selected pan/tilt head is switched on or off depending on the position of EXT ON/OFF Switch 33.

34 ND Filter Switch [ND, ON/OFF]

If this switch is connected to a lens with a built-in ND filter function, it switches on and off the ND filter. For details, refer to the Operating Instructions for the Lenses and Pan/tilt Head.

Note: At the same time as a pan/tilt head is selected with CONTROL Switch 22, the ND filter of the selected pan/tilt head is switched on or off depending on the position of ND ON/OFF Switch 34.

35 Option Switch [OP, ON/OFF]

Controls the option switch terminal on the pan/tilt head AC adapter (AW-PS300) to short circuit or open it. That is, the option switch terminal is shorted when OP ON/OFF Switch 35 is in the ON position, or is opened when it is in the OFF position. For details, refer to the Operating Instructions for the Pan/tilt Head AC Adapter.

Note: At the same time as a pan/tilt head is selected with CONTROL Switch 22, the option switch terminal on the selected pan/tilt head is shorted or opened depending on the position of OP ON/OFF Switch 35.

36 Zoom Lever [ZOOM, TELE/WIDE]

Used to control the zoom operation of the lens that is connected to the pan/tilt head selected with CONTROL Switch 22. Zoom speed varies according to the angle of the lever. The lens moves toward TELE when the lever is moved toward TELE, or toward WIDE when the lever is moved toward WIDE, provided that ZOOM REVERSE Switch 50 is in the NOR position. When ZOOM REVERSE Switch 50 is set to the REV position, the lens moves in the opposite direction. ZOOM/FOCUS EXCHANGE Switch 51 may be used to exchange its function with FOCUS Lever 37.

37 Focus Lever [FOCUS FAR/NEAR]

Used to adjust the focus of the lens that is connected to the pan/tilt head selected with CONTROL Switch 22. Used to adjust the lens focus at varying speed depending on the angle of the lever. The lens is focused far when the lever is moved toward FAR, or near when the lever is moved toward NEAR, provided that FOCUS REVERSE Switch 52 is in the NOR position.

When FOCUS REVERSE Switch 52 is set to the REV position, the lens focus operates in the opposite direction. ZOOM/FOCUS EXCHANGE Switch 51 may be used to exchange its function with ZOOM Lever 36.

37 Focus Lever [FOCUS FAR/NEAR]

Used to adjust the focus of the lens that is connected to the pan/tilt head selected with CONTROL Switch 22. Used to adjust the lens focus at varying speed depending on the angle of the lever. The lens is focused far when the lever is moved toward FAR, or near when the lever is moved toward NEAR, provided that FOCUS REVERSE Switch 52 is in the NOR position. When FOCUS REVERSE Switch 52 is set to the REV position, the lens focus operates in the opposite direction. ZOOM/FOCUS EXCHANGE Switch 51 may be used to exchange its function with ZOOM Lever 36.

38 Pan/tilt Lever

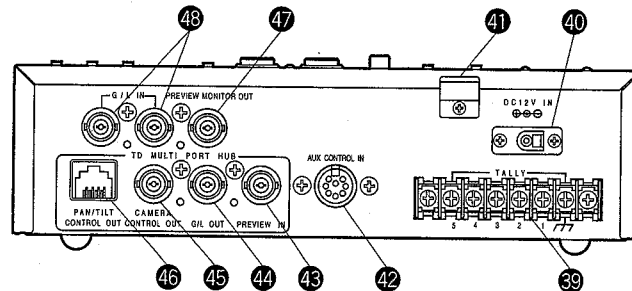
[PAN/TILT, UP/DOWN/LEFT/RIGHT]

Used to control the pan/tilt operation of the pan/tilt head selected with CONTROL Switch 22. Controls the head's pan/tilt operation at varying speed depending on the angle of the lever. The pan/tilt head turns up when the lever is moved toward UP, or down when it is moved toward DOWN, provided that TILT REVERSE Switch 53 is in the NOR position. The pan/tilt head moves in the opposite direction if the TILT REVERSE Switch 53 is in the REV position. The pan/tilt head turns leftward when the lever is moved toward LEFT, or rightward when it is moved toward RIGHT, provided that PAN REVERSE Switch 54 is in the NOR position. The pan/tilt head moves in the opposite direction if the PAN REVERSE Switch 54 is in the REV position.

Note: TILT REVERSE Switch 53 and PAN REVERSE

Switch 54 may be used to reverse the operating direction of the pan/tilt head, but be sure to set the operating direction of the pan/tilt head with its mounting direction selection switch during its installation depending on whether the pan/tilt head is mounted on the floor or is suspended. Unless the mounting direction selection switch on the pan/tilt head is properly set, the pan/tilt head will pan or tilt in the opposite direction and the pan/tilt head operation limiters will not be properly stored in the memory. For details on the setting of this switch.

REAR PANEL



39 TALLY Terminal [TALLY] (6-pin Terminal Board)

Connect it to the tally connector on a special effect generator (SEG) or a video switcher, for example. When the voltage of any of the jacks [1] to [5] of the terminal falls to the ground level, the corresponding TALLY Indicator 21 and the Tally Indicator on the Pan/tilt Head (AW-PH300) light red.

40 12V DC Input Connector [DC 12V IN] (DC Jack)

Connect the AC Adapter AW-PS301 (optional).

41 Cord Clamp (Clamper)

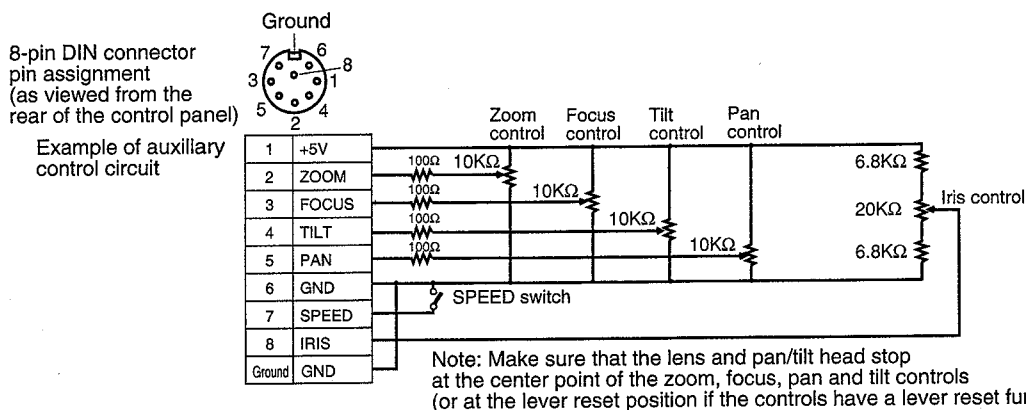
Clamps the DC cord of the AC Adapter AW-PS301 (optional) connected to DC 12V IN Connector 40 to prevent its disconnection.

42 Auxiliary Control Input Connector

[AUX CONTROL IN] (8-pin DIN Connector)

External control signals are input to this connector in controlling the head's pan/tilt, lens zoom, focus and iris operations.

Note: In externally controlling the pan/tilt head and lens through this connector, set IRIS LEVEL Control 26 on this control panel to the center point (straight up), and do not simultaneously operate SPEED Switch 29, ZOOM Lever 36, FOCUS Lever 37, and PAN/TILT Lever 38. Operation errors may occur if external controls are simultaneously used.



43 Preview Video Input Connector [TO MULTI-PORT HUB, PREVIEW IN] (BNC Connector)

Connect it to the preview video output connector [PREVIEW OUT] on the Multiport Hub with a coaxial cable (5C-2V or equivalent). The maximum allowable length of the cable is 10 meters.

44 Genlock Output Connector [TO MULTI-PORT HUB, G/L OUT] (BNC Connector)

Connect it to the G/L input connector [G/L IN] on the Multiport Hub with a coaxial cable (5C-2V or equivalent) in operating the camera in external sync mode. The cable can be extended up to 10 meters.

45 Camera Control Output Connector [TO MULTI-PORT HUB, CAMERA CONTROL OUT] (BNC Connector)

Connect it to camera control input connector [CAMERA CONTROL IN] on the Multiport Hub with a coaxial cable (5C-2V or equivalent), which may be extended up to 10 meters.

46 Pan/tilt Control Output Connector [TO MULTI-PORT HUB, PAN/TILT CONTROL OUT] (RJ-45 8-pin Modular Jack)

Connect it to pan/tilt control output connector [P/T CONTROL IN] on the Multiport Hub with a 10BASE-T straight cable (UTP category 5 or equivalent), which may be extended up to 10 meters.

47 Preview Video Output Connector [PREVIEW MONITOR OUT] (BNC Connector)

The video signals of the camera selected with CONTROL Switch 22 are output from this connector so that the selected camera can be visually confirmed. Connect this connector to the monitor video input with a coaxial cable.

Note: The preview video signals are for confirmation of which camera has been selected, so the picture quality proper to the camera cannot be guaranteed. To output camera video signals, use video output connector [VIDEO OUT] or S-video output connector [S-VIDEO OUT] on the Multiport Hub.

48 Genlock Input Connectors [G/L IN] (BNC Connector)

Black burst signals or are input to one of the two connectors in operating the camera in external sync mode. The two connectors are automatically terminated, so input the above signals to one of them and use the other as a loop-through output.

47 Preview Video Output Connector [PREVIEW MONITOR OUT] (BNC Connector)

The video signals of the camera selected with CONTROL Switch 22 are output from this connector so that the selected camera can be visually confirmed. Connect this connector to the monitor video input with a coaxial cable.

Note: The preview video signals are for confirmation of which camera has been selected, so the picture quality proper to the camera cannot be guaranteed. To output camera video signals, use video output connector [VIDEO OUT] or S-video output connector [S-VIDEO OUT] on the Multiport Hub.

48 Genlock Input Connectors [G/L IN] (BNC Connector)

Black burst signals or are input to one of the two connectors in operating the camera in external sync mode. The two connectors are automatically terminated, so input the above signals to one of them and use the other as a loop-through output.

43 Preview Video Input Connector [TO MULTIPOINT HUB, PREVIEW IN] (BNC Connector)
Connect it to the preview video output connector [PREVIEW OUT] on the Multiport Hub with a coaxial cable (5C-2V or equivalent). The maximum allowable length of the cable is 10 meters.

44 Genlock Output Connector [TO MULTIPOINT HUB, G/L OUT] (BNC Connector)
Connect it to the G/L input connector [G/L IN] on the Multiport Hub with a coaxial cable (5C-2V or equivalent) in operating the camera in external sync mode. The cable can be extended up to 10 meters.

45 Camera Control Output Connector [TO MULTIPOINT HUB, CAMERA CONTROL OUT] (BNC Connector)
Connect it to camera control input connector [CAMERA CONTROL IN] on the Multiport Hub with a coaxial cable (5C-2V or equivalent), which may be extended up to 10 meters.

46 Pan/tilt Control Output Connector [TO MULTIPOINT HUB, PAN/TILT CONTROL OUT] (RJ-45 8-pin Modular Jack)
Connect it to pan/tilt control input connector [P/T CONTROL IN] on the Multiport Hub with a 10BASE-T straight cable (UTP category 5 or equivalent), which may be extended up to 10 meters.

47 Preview Video Output Connector [PREVIEW MONITOR OUT] (BNC Connector)
The video signals of the camera selected with CONTROL Switch 22 are output from this connector so that the selected camera can be visually confirmed. Connect this connector to the monitor video input with a coaxial cable.

Note: The preview video signals are for confirmation of which camera has been selected, so the picture quality proper to the camera cannot be guaranteed. To output camera video signals, use video output connector [VIDEO OUT] or S-video output connector [S-VIDEO OUT] on the Multiport Hub.

48 Genlock Input Connectors [G/L IN] (BNC Connector)
Black burst signals or are input to one of the two connectors in operating the camera in external sync mode. The two connectors are automatically terminated, so input the above signals to one of them and use the other as a loop-through output.

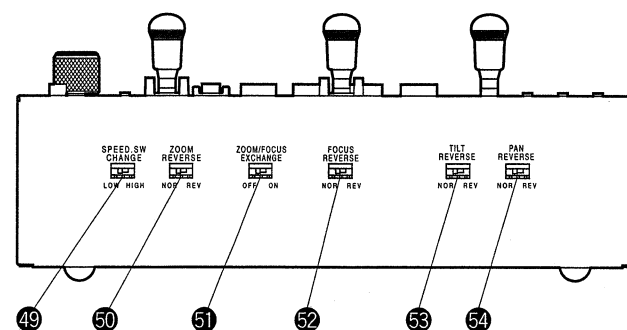
54 Pan Reverse Switch [PAN REVERSE, NOR/REV]
Changes the pan direction controlled by PAN/TILT Lever 38. The pan/tilt head turns leftward when PAN/TILT Lever 38 is moved toward LEFT, or rightward if it moved toward RIGHT. The rotary head turns in the opposite direction if the PAN REVERSE Switch 54 is in the REV position, provided that PAN REVERSE Switch 54 is in the NOR position. When PAN REVERSE Switch 54 is set to the REV position, the pan/tilt head turns in the opposite directions. With PAN REVERSE Switch 54 in the REV position, the operating directions shown on the panel are opposite to the indications on the panel. In this case, paste the supplied seal on the panel.

Note: TILT REVERSE Switch 53 and PAN REVERSE Switch 54 may be used to reverse the operating direction of the pan/tilt head, but be sure to set the operating direction of the pan/tilt head with its mounting direction selection switch during its installation depending on whether the pan/tilt head is mounted on the floor or is suspended. Unless the mounting direction selection switch on the pan/tilt head is properly set, the pan/tilt head will pan or tilt in the opposite direction and the pan/tilt head operation limiters will not be properly stored in the memory. For details on the setting of this switch, refer to INSTALLATION OF PAN/TILT HEAD.

50 Zoom Reverse Switch [ZOOM REVERSE, NORM/REV]
Changes the operating direction of ZOOM Lever 36. The lens zoom moves toward TELE when ZOOM Lever 36 is moved toward TELE, or toward WIDE when it is moved toward WIDE, provided that ZOOM REVERSE Switch 50 is in the NOR position. When ZOOM REVERSE Switch 50 is set to the REV position, lens zoom operation takes place in the opposite direction. With ZOOM REVERSE Switch 50 in the REV position, the operating directions shown on the panel are reversed. In this case, paste the supplied seal on the panel.

51 Zoom/Focus Exchange Switch [ZOOM/FOCUS EXCHANGE, ON/OFF]
ZOOM Lever 36 and FOCUS Lever 37 exchange their function between them when this switch is set to the ON position. Unless this exchange is needed, keep the switch in the OFF position. With ZOOM/FOCUS EXCHANGE Switch 51 in the ON position, the operations shown on the panel do not agree with the indications on the panel. In this case, paste the supplied seal on the panel.

■ Front Panel

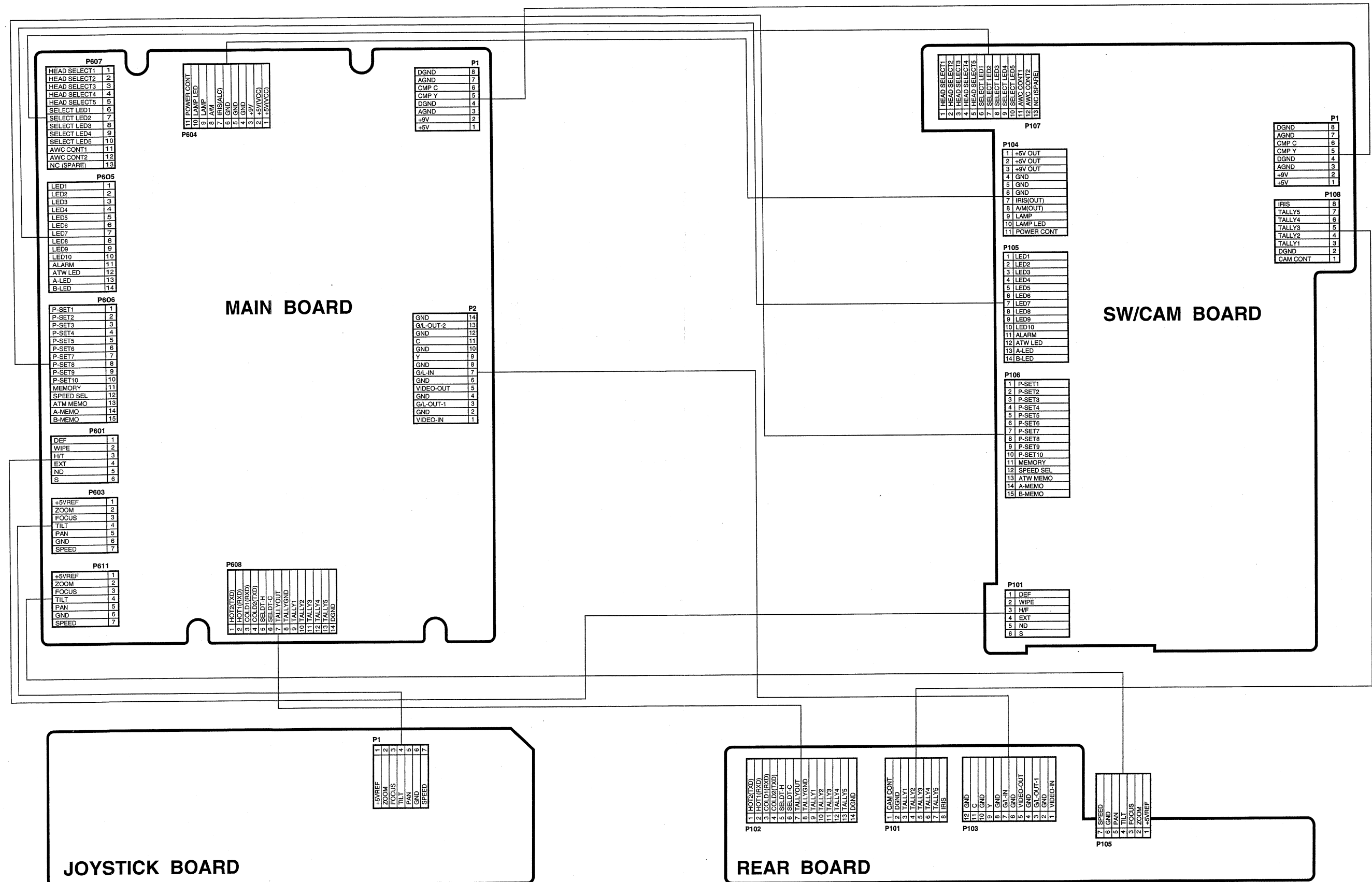


52 Focus Reverse Switch [FOCUS REVERSE, NOR/REV]
Changes the operating direction of FOCUS Lever 37. The lens is focused far when FOCUS Lever 37 is moved toward FAR, or near when the lever is moved toward NEAR, provided that FOCUS REVERSE Switch 52 is in the NOR position. When FOCUS REVERSE Switch 52 is set to the REV position, the lens focus operates in the opposite direction. With FOCUS REVERSE Switch 52 in the REV position, the operating directions shown on the panel are opposite to the indications on the panel. In this case, paste the supplied seal on the panel.

53 Tilt Reverse Switch [TILT REVERSE, NOR/REV]
Changes the tilt direction controlled by PAN/TILT Lever 38. The pan/tilt head turns up when PAN/TILT Lever 38 is moved toward UP, or down when it is moved toward DOWN, provided that TILT REVERSE Switch 53 is in the NOR position. The pan/tilt head moves in the opposite direction if the TILT REVERSE Switch 53 is in the REV position. With TILT REVERSE Switch 53 in the REV position, the operating directions shown on the panel are opposite to the indications on the panel. In this case, paste the supplied seal on the panel.

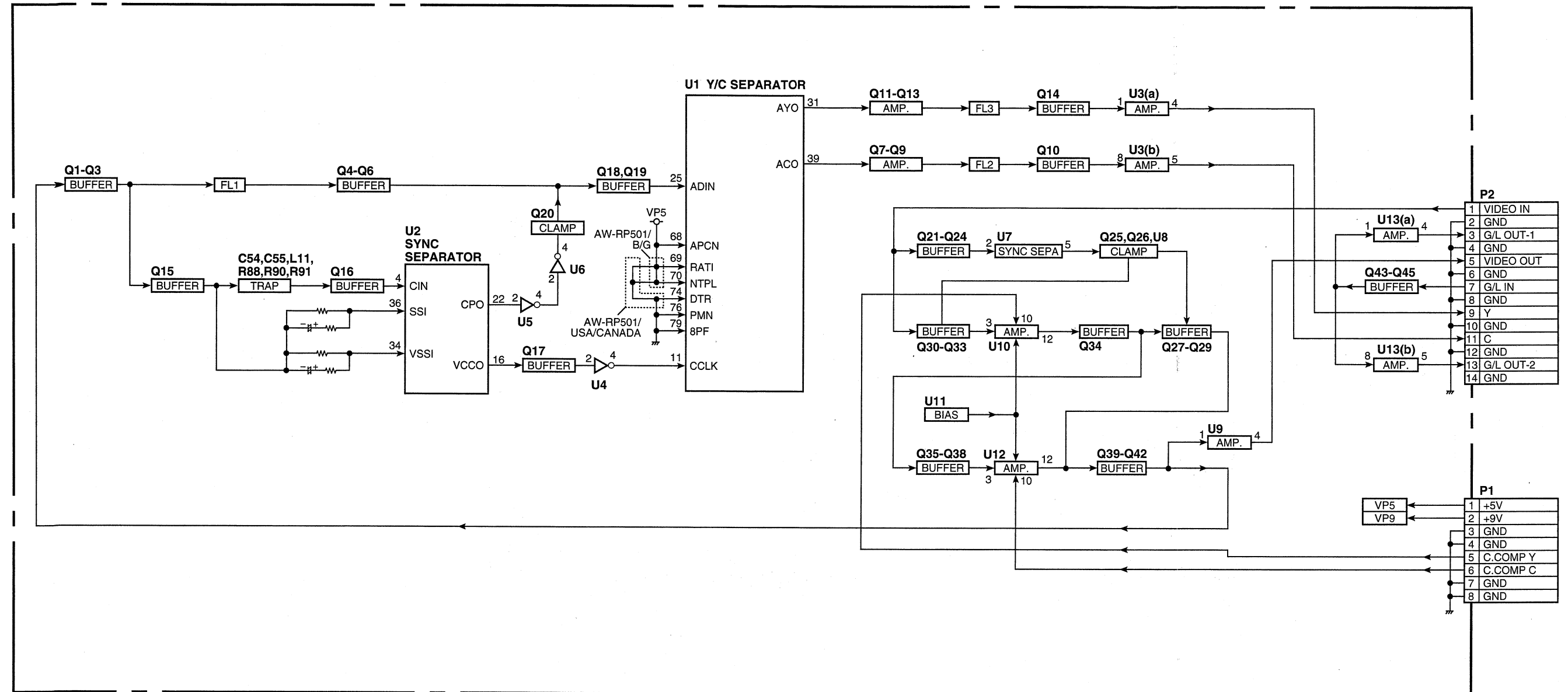
49 Speed Switch Changing Switch [SPEED SW CHANGE, LOW/HIGH]
Changes the polarity of SPEED Switch 29. If ZOOM lever 36, FOCUS Lever 37, or PAN/TILT Lever 38 is moved while keeping SPEED Switch 29 depressed, the corresponding operation takes place at low speed, provided that SPEED SW CHANGE Switch 49 is in the LOW position. If one of these levers is moved with SPEED Switch 29 depressed when SPEED SW CHANGE Switch 49 is in the HIGH position, the corresponding operation takes place at high speed. The speed polarity can also be changed by pressing MEMORY Switch 27 while keeping SPEED Switch 29 depressed. When this step is taken again, the original speed polarity is restored. Take this step if it is difficult to shift SPEED SW CHANGE Switch 49 because this control panel is mounted on a console or the like.

WIRING DIAGRAM



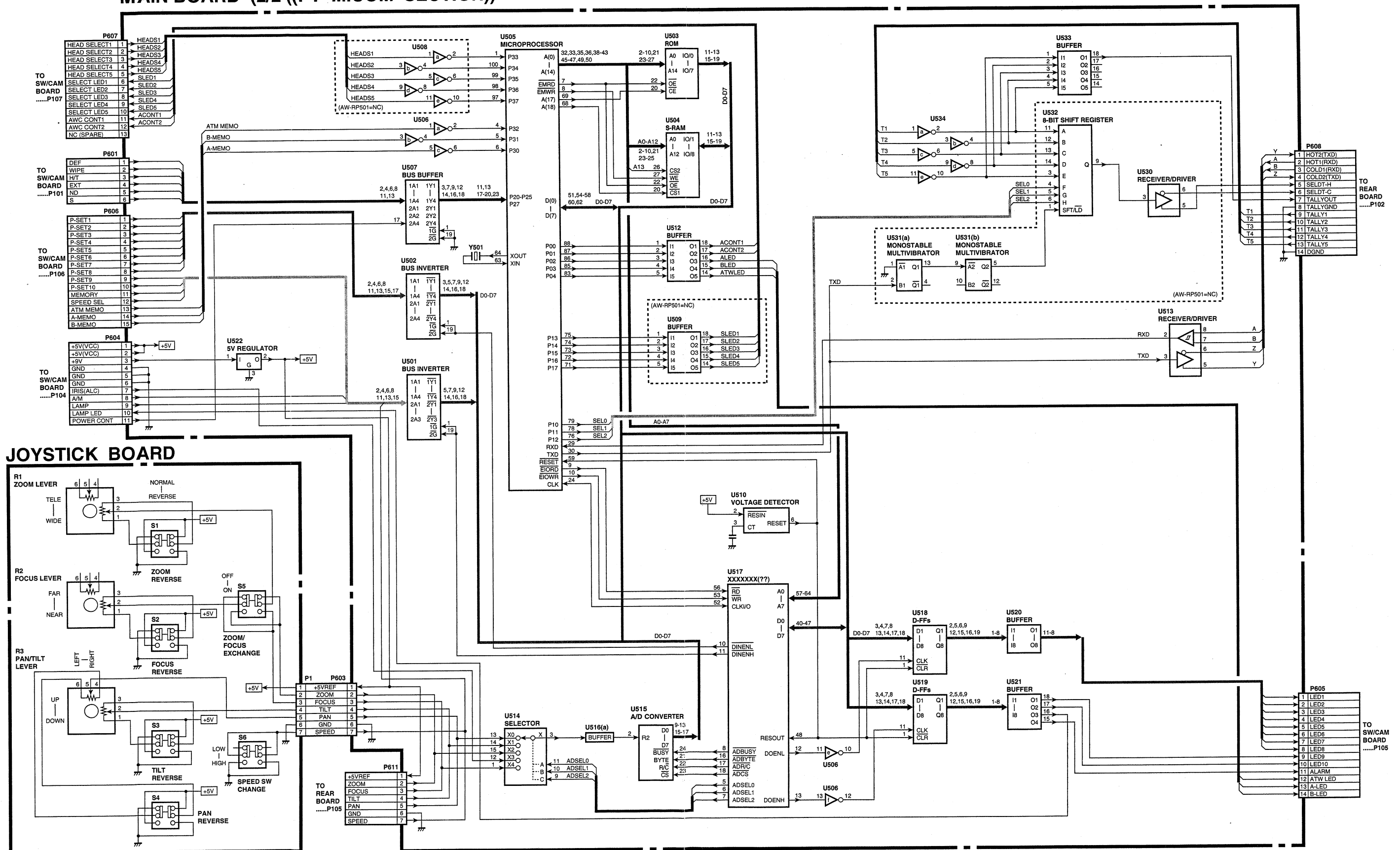
BLOCK DIAGRAM OF MAIN BOARD (1/2 (Cable Y/C SECTION))

MAIN BOARD



BLOCK DIAGRAM OF MAIN BOARD (2/2 (PT MICOM SECTION)) & JOYSTICK BOARD

MAIN BOARD (2/2 ((PT MICOM SECTION))

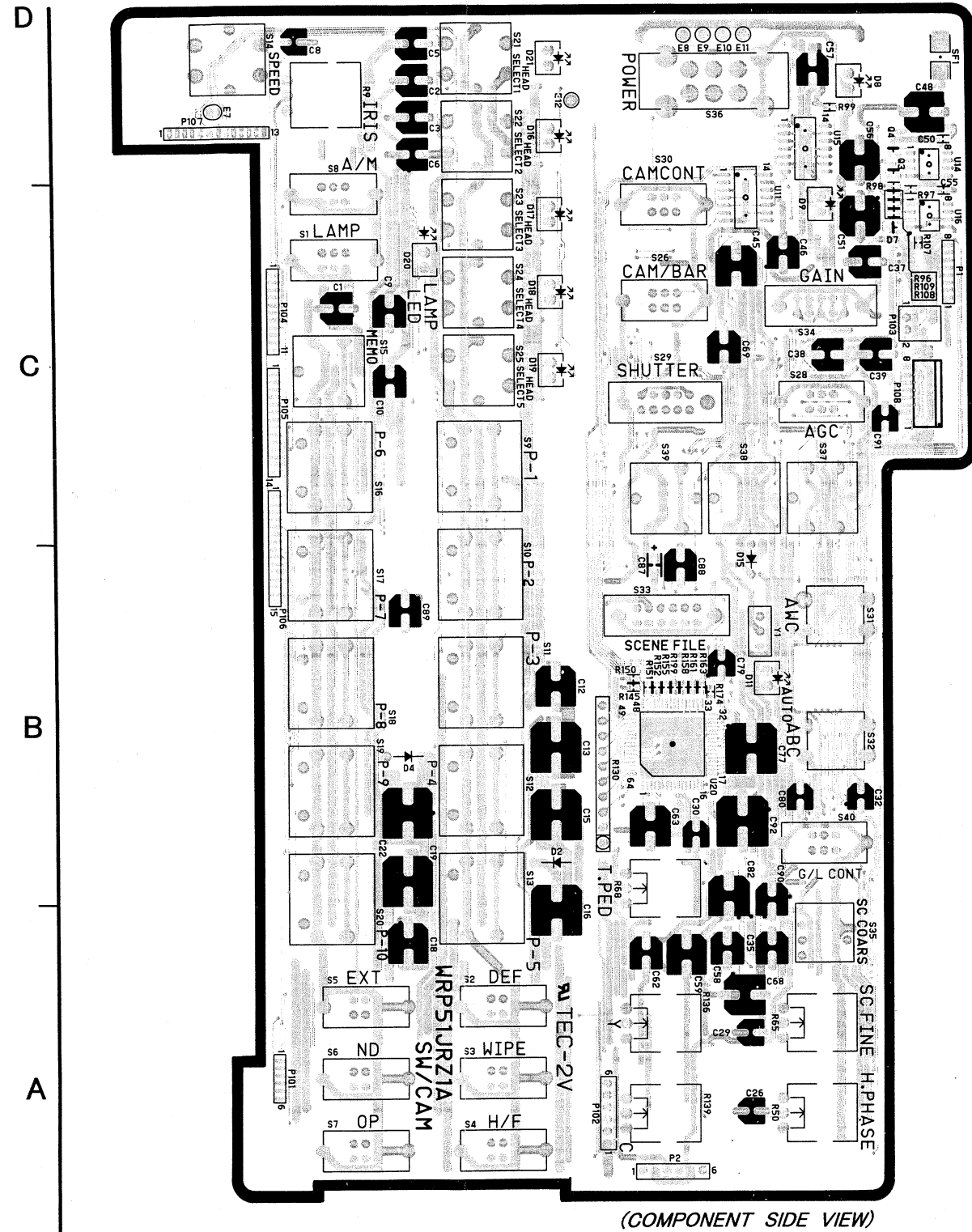


MAIN BOARD (2/2 ((PT MICOM SECTION))

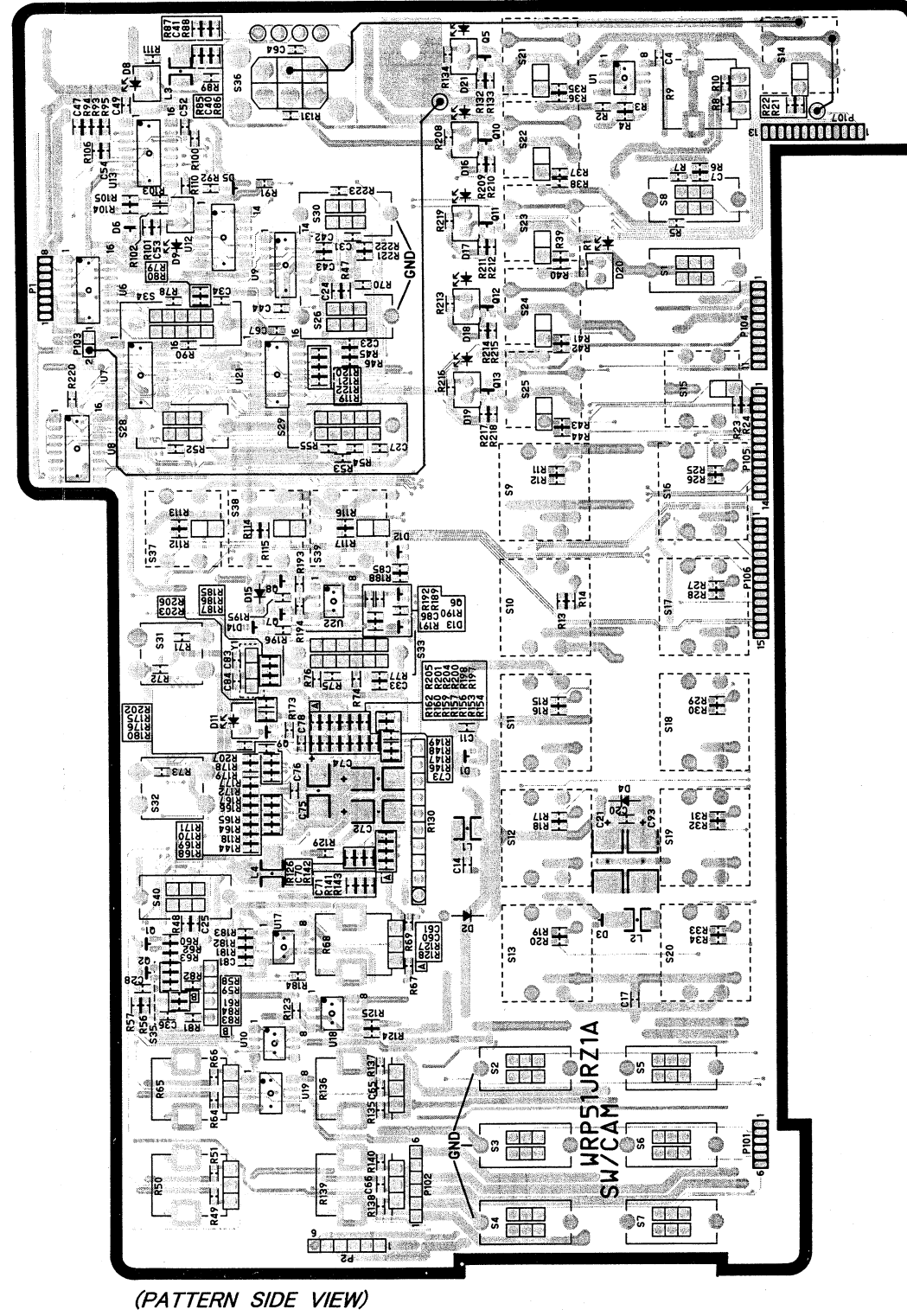


CONDUCTOR VIEW OF SW / CAM BOARD

SW/CAM BOARD



(COMPONENT SIDE VIEW)



(PATTERN SIDE VIEW)

<INDEX>

SW/CAM BOARD

U1	D5
U6	C4
U7	C4
U8	C3
U9	C4
U10	A4
U11	C2
U12	C4
U13	D4
U14	D3
U15	D3
U16	C3
U17	B4
U18	A4
U19	A4
U20	B2
U21	C4
U22	B4

Q1	B4
Q2	A4
Q3	D3
Q4	D3
Q5	D5
Q6	B4
Q7	B4
Q8	B4
Q9	B4
Q10	D5
Q11	C5
Q12	C5
Q13	C5

D1	B4
D2	B2
D3	B5
D4	B1
D5	D4
D6	C4
D7	C3
D8	D3
D9	C3
D10	D5
D11	B2
D12	C4
D13	B4
D14	B4
D15	B2
D16	D2
D17	C2
D18	C2
D19	C2
D20	C2
D21	D2

SCHEMATIC DIAGRAM OF SW / CAM

SW/CAM BOARD

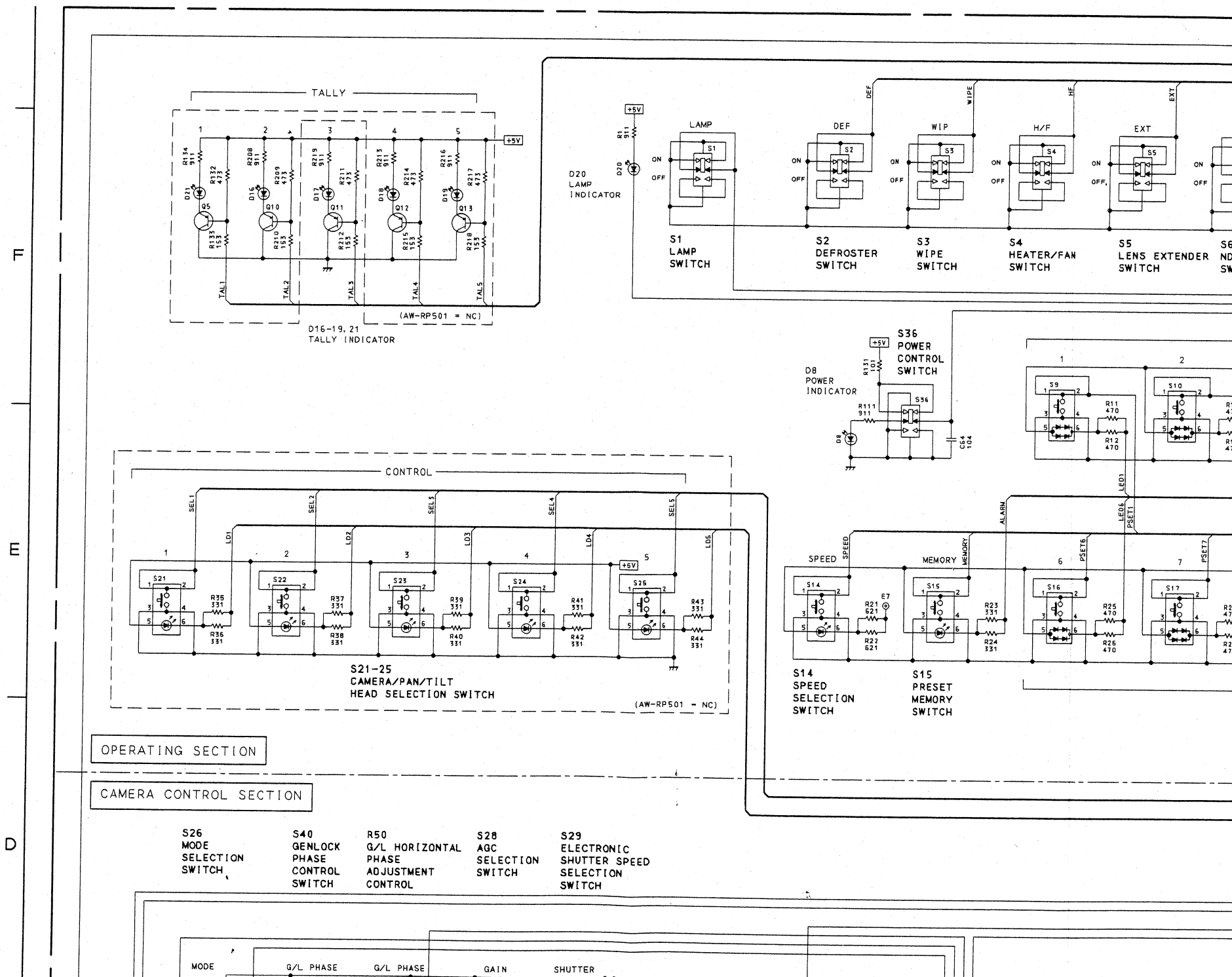
<INDEX>

SW/CAM BOARD

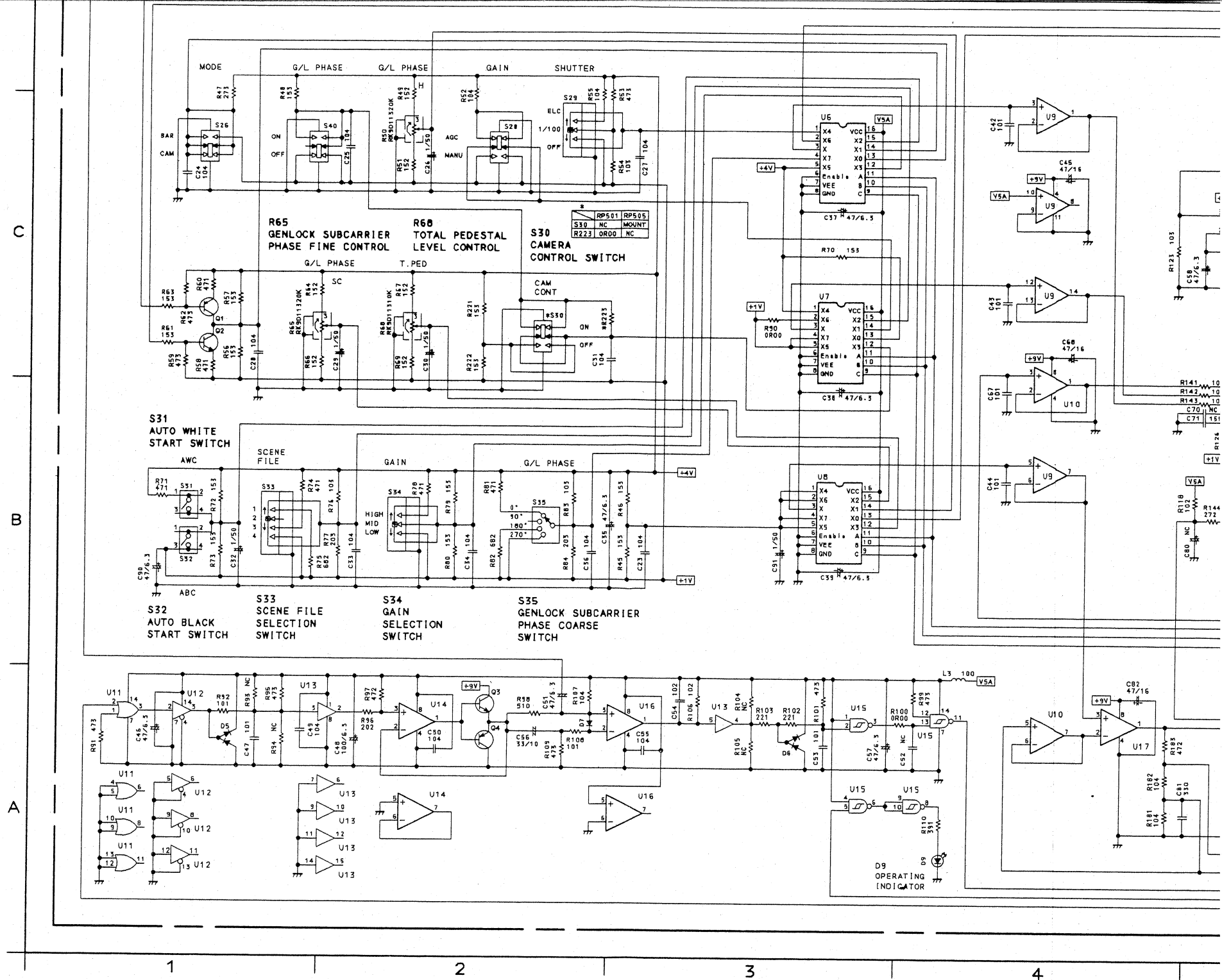
U1 F5,F6
 U6 C3
 U7 C3
 U8 B3
 U9 B4,C4
 U10 A4,B4
 U11 A1
 U12 A1
 U13 A2,A3
 U14 A2
 U15 A3,A4
 U16 A2,A3
 U17 A4,A5
 U18 C5
 U19 C7
 U20 B5
 U21 B7
 U22 A6

Q1 C1
 Q2 C1
 Q3 A2
 Q4 A2
 Q5 F1
 Q6 A5
 Q7 A6
 Q8 A6
 Q9 B7
 Q10 F1
 Q11 F2
 Q12 F2
 Q13 F2

D1 D7
 D2 D7
 D3 F7
 D4 F7
 D5 A1
 D6 A3
 D7 A2
 D8 E3
 D9 A4
 D11 B7
 D12 A5
 D13 A5
 D14 A6
 D15 A6
 D16 F1
 D17 F1
 D18 F2



D14 A6
D15 A6
D16 F1
D17 F1
D18 F2
D19 F2
D20 F3
D21 F1

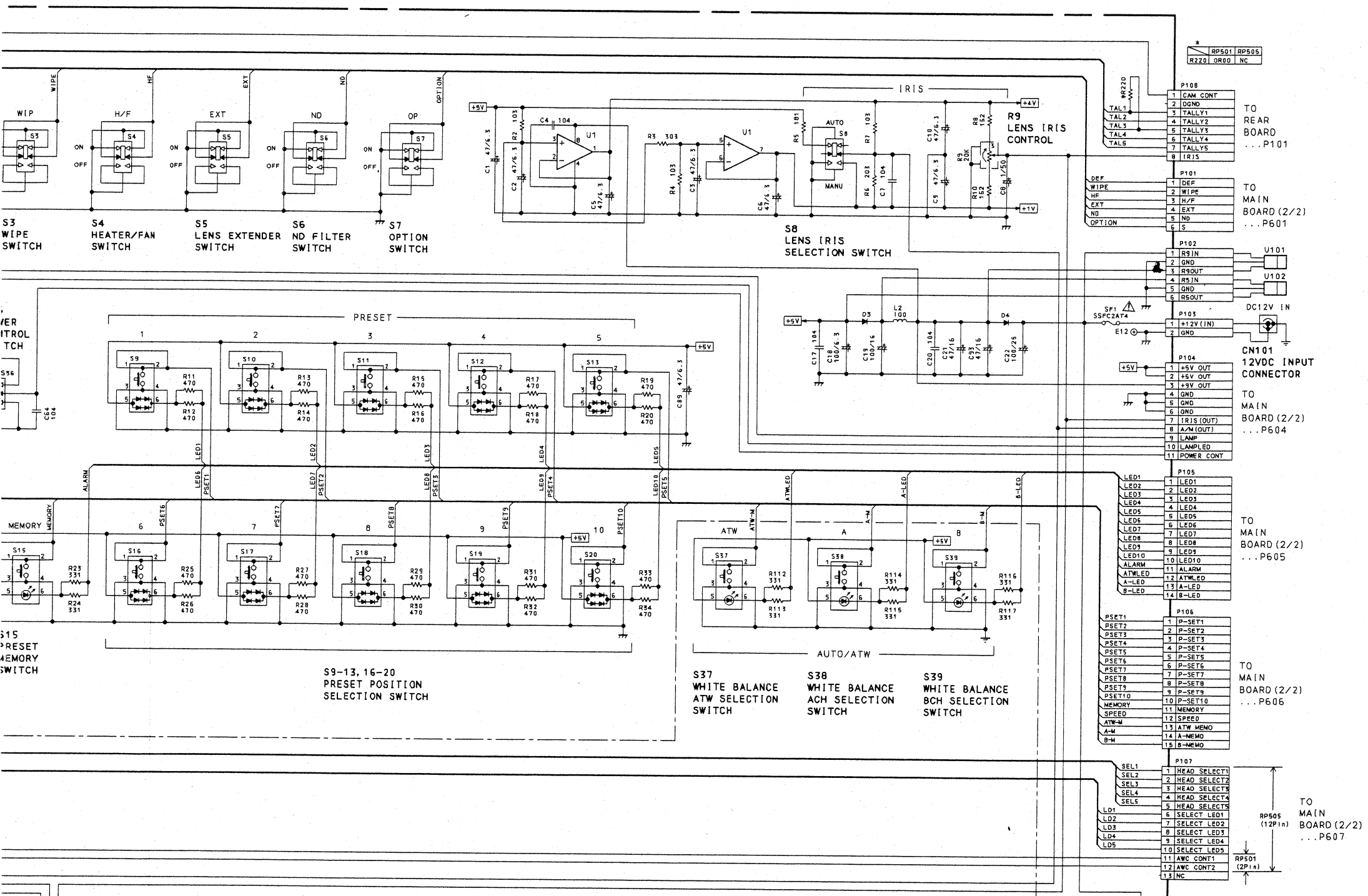


SW CAM BOARD

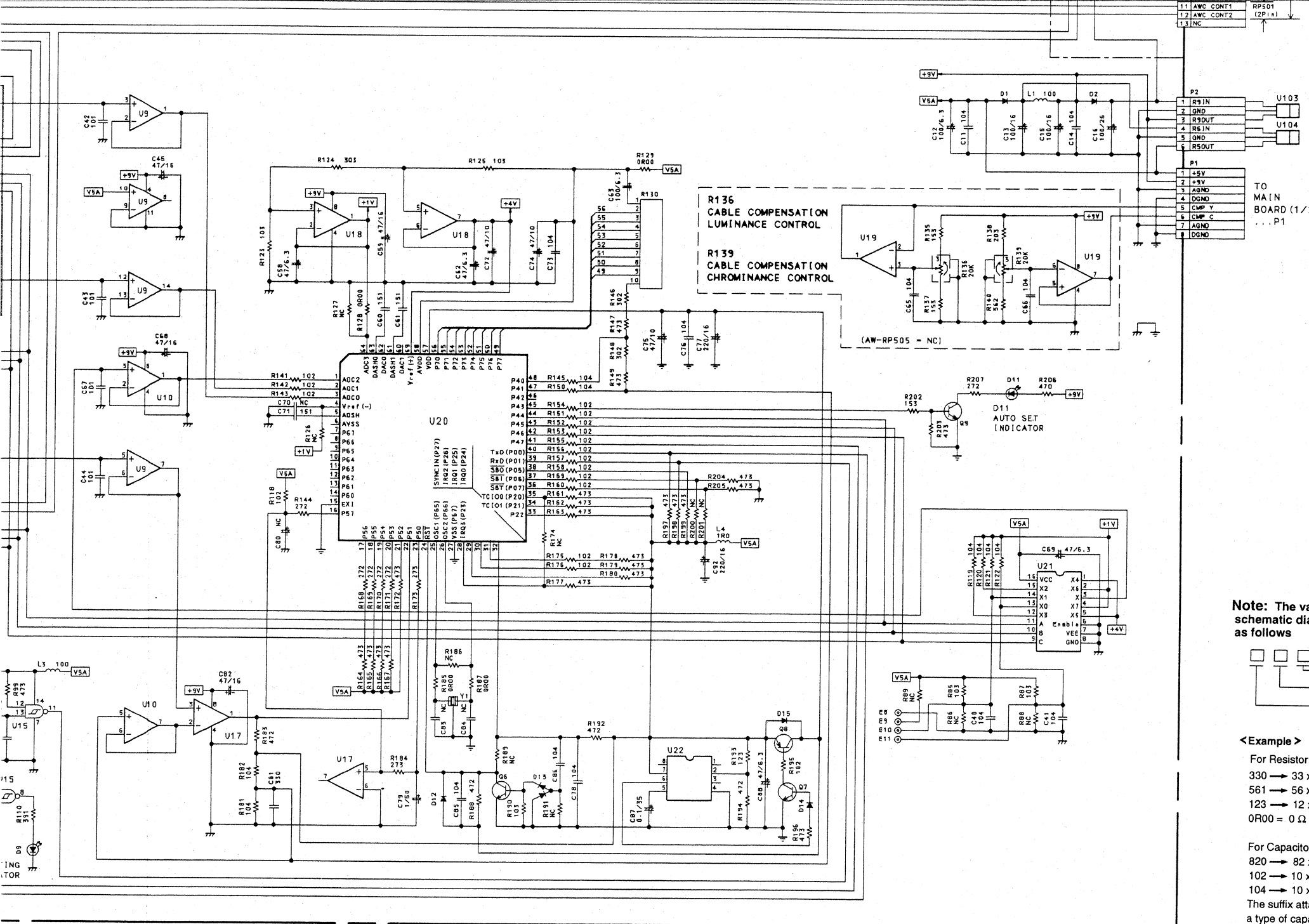
	U20		U11	U14	U15	U16	U10	U17	U18	U19	U22	U1	U6	U7	U8	U9	U12	U13	U21
1	4.4	1	0.0	4.7	5.0	5.0	4.4	4.6	1.0	2.8	0.1	4.0	1.0	4.0	2.5	3.8	0.0	5.0	4.0
2	3.8	2	5.0	4.0	5.0	3.5	4.4	2.5	1.0	2.8	1.4	4.0	4.3	1.0	2.5	3.8	5.0	5.0	1.0
3	3.8	3	5.0	5.0	0.0	4.0	4.4	3.0	1.0	2.8	0.0	4.1	3.8	3.7	3.0	3.8	5.0	5.0	4.4
4	1.0	4	0.0	0.0	5.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	2.5	9.0	0.0	5.0	1.0
5	4.6	5	0.0	0.0	0.0	5.0	2.5	5.0	4.0	2.9	1.2	1.0	4.0	1.0	2.5	3.0	0.0	5.0	4.0
6	0.0	6	0.0	4.8	5.0	0.0	2.5	0.0	4.0	2.9	4.7	1.0	0.0	0.0	0.0	3.0	0.0	0.0	0.0
7	0.0	7	0.0	4.8	0.0	1.9	2.5	1.7	4.0	2.9	5.0	1.0	0.0	0.0	0.0	3.0	0.0	0.0	0.0
8	5.0	8	0.0	5.0	0.0	5.0	9.0	9.0	9.0	9.0	0.0	9.0	0.0	0.0	0.0	8.0	0.0	0.0	0.0
9	5.0	9	0.0		5.0								0.4	0.4	0.4	0.0	0.0	0.0	0.4
10	0.0	10	0.0		5.0								0.4	0.4	0.4	5.0	0.0	0.0	0.4
11	5.0	11	0.0		5.0								0.4	0.4	0.4	0.0	0.0	0.0	0.4
12	0.0	12	0.0		5.0								1.0	4.0	2.9	3.8	0.0	0.0	1.0
13	5.0	13	0.0		0.0								0.1	4.0	3.1	3.8	0.0	-	4.7
14	0.0	14	5.0		5.0								1.1	1.0	1.8	3.7	5.0	0.0	4.7
15	0.0	15											2.5	2.1	2.4			0.0	1.0
16	5.0	16											5.0	5.0	5.0			5.0	5.0

	Q3	Q4	Q1	Q2	Q7	Q8	Q6	Q11
B	4.7	4.7	4.0	1.8	0.7	4.3	0.0	5.1
C	9.0	0.0	0.2	1.1	0.0	5.0	5.0	0.0
E	4.0	4.0	4.0	1.1	0.0	5.0	0.0	3.9

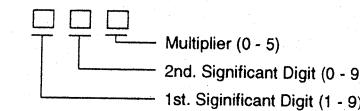
DIAGRAM OF SW / CAM BOARD



Important safety notice
 Components identified by "Δ" mark have special characteristics for safety.
 When replacing any of these components, use only manufacturer's specified parts.



Note: The value indicated in the schematic diagram should be read as follows



<Example>

For Resistor:

330 $\rightarrow 33 \times 10^0 = 33 \Omega$
 561 $\rightarrow 56 \times 10^1 = 560 \Omega$
 123 $\rightarrow 12 \times 10^3 = 12k \Omega$
 0R00 = 0 Ω

For Capacitor:

820 $\rightarrow 82 \times 10^0 = 82 pF$
 102 $\rightarrow 10 \times 10^2 = 1000 pF = 0.001 \mu F$
 104 $\rightarrow 10 \times 10^4 = 100000 pF = 0.1 \mu F$
 The suffix attached to capacitance indicates a type of capacitor.

4	Q1	Q2	Q7	Q8	Q6	Q11
7	4.0	1.8	0.7	4.3	0.0	5.1
0	0.2	1.1	0.0	5.0	5.0	0.0
0	4.0	1.1	0.0	5.0	0.0	3.9

SCHEMATIC DIAGRAM OF MAIN BOARD

<INDEX>

MAIN BOARD (1/2)

(CABLE Y/C SECTION)

U1 C2
U2 A2
U3 C4
U4 A3
U5 A3
U6 A3
U7 D6
U8 C7
U9 B7
U10 C6
U11 C7
U12 B6
U13 A7

Q1 D1
Q2 D1
Q3 D2
Q4 D3
Q5 D3
Q6 D3
Q7 C3
Q8 C3
Q9 C3
Q10 C4
Q11 B3
Q12 B3
Q13 B3
Q14 B4
Q15 B1
Q16 A1
Q17 A3
Q18 A4
Q19 A4
Q20 A4
Q21 D5
Q22 D5
Q23 D5
Q24 D6
Q25 D6
Q26 C7
Q27 D7
Q28 D7
Q29 D7
Q30 C5
Q31 C5
Q32 C6
Q33 C6
Q34 C6
Q35 B5
Q36 B5
Q37 B5
Q38 B6
Q39 B7
Q40 B7
Q41 B7
Q42 B7
Q43 A6
Q44 A7
Q45 A7

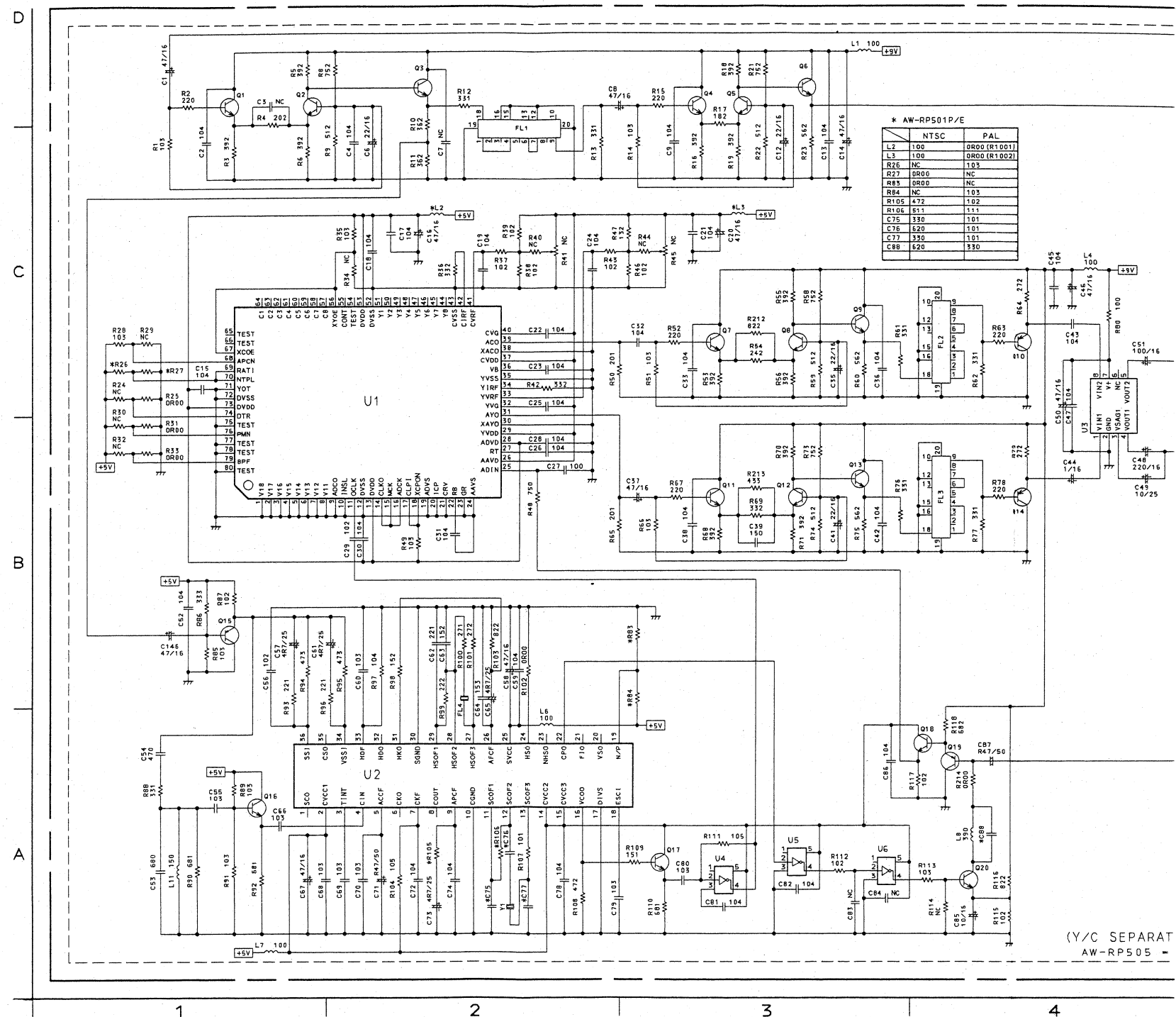
D1 D7
D2 C7

MAIN BOARD (1/2) (CABLE Y/C SECTION)

	U2	U4	U5	U6	U7	U8	U9	U10	U11	U12	U13
1	3.0	-	-	-	0.0	0.0	1.9	3.2	3.2	3.2	1.9
2	5.0	2.3	0.2	4.7	1.5	0.0	0.0	2.4	3.2	2.4	0.0
3	2.5	0.0	0.0	0.0	0.0	0.0	1.7	3.2	3.2	2.4	1.6
4	3.1	2.4	4.7	0.2	0.0	0.0	1.6	3.2	0.0	3.2	1.5
5	0.2	5.0	5.0	5.0	5.0	1.6	-	3.8	-	1.5	-
6	0.0	-	-	-	1.3	-	1.7	7.9	3.8	6.6	1.6
7	3.4	-	-	-	5.0	-	5.0	-	3.8	-	5.0
8	2.4	-	-	-	5.0	-	2.3	3.8	9.0	3.8	2.1
9	2.6	-	-	-	-	-	-	-	-	-	-
10	0.0	-	-	-	-	-	-	3.8	-	3.8	-
11	2.9	-	-	-	-	-	-	-	-	-	-
12	2.9	-	-	-	-	-	-	6.7	-	4.4	-
13	3.0	-	-	-	-	-	-	-	-	-	-
14	5.0	-	-	-	-	-	-	-	-	0.3	-
15	5.0	-	-	-	-	-	-	-	-	-	-
16	3.2	-	-	-	-	-	-	-	-	-	-
17	0.0	-	-	-	-	-	-	-	-	-	-
18	3.7	-	-	-	-	-	-	-	-	-	-
19	5.0	-	-	-	-	-	-	-	-	-	-
20	4.2	-	-	-	-	-	-	-	-	-	-
21	4.2	-	-	-	-	-	-	-	-	-	-
22	0.2	-	-	-	-	-	-	-	-	-	-
23	4.0	-	-	-	-	-	-	-	-	-	-
24	0.0	-	-	-	-	-	-	-	-	-	-
25	5.0	-	-	-	-	-	-	-	-	-	-
26	3.2	-	-	-	-	-	-	-	-	-	-
27	2.8	-	-	-	-	-	-	-	-	-	-
28	3.8	-	-	-	-	-	-	-	-	-	-
29	3.8	-	-	-	-	-	-	-	-	-	-
30	0.0	-	-	-	-	-	-	-	-	-	-
31	0.0	-	-	-	-	-	-	-	-	-	-
32	4.5	-	-	-	-	-	-	-	-	-	-
33	0.0	-	-	-	-	-	-	-	-	-	-
34	2.4	-	-	-	-	-	-	-	-	-	-
35	4.5	-	-	-	-	-	-	-	-	-	-
36	2.4	-	-	-	-	-	-	-	-	-	-

	Q23	Q26	Q27	Q28	Q29	Q36	Q44	Q45	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Q16	Q17	Q18	Q19	Q20	Q1	Q2	Q3	Q4	Q5	Q6	Q21	Q22	Q24	Q25	Q30	Q31	Q32	Q33	Q34	Q35	Q37	Q38	Q39	Q40	Q41	Q42	Q43	
B	2.6	0.0	6.8	8.0	4.0	3.7	2.8	7.9	3.5	3.6	6.2	2.8	3.6	3.6	6.1	2.7	1.2	2.5	3.1	16.0	1.0	0.1	3.6	3.6	6.2	3.6	3.6	6.3	3.3	2.7	6.7	5.0	3.3	0.0	7.2	8.6	6.7	4.8	6.8	6.2	3.7	4.0	3.2	8.2	3.4	
C	6.7	7.0	0.0	9.0	4.4	6.8	8.0	9.0	8.9	6.2	8.9	0.0	8.9	6.1	8.9	0.0	0.0	5.0	5.0	5.0	0.0	1.0	9.0	6.2	9.0	9.0	6.3	9.0	9.0	9.0	9.0	9.0	9.0	6.8	0.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0
E	1.9	3.4	8.1	7.4	5.6	3.0	2.1	7.3	2.9	2.9	5.6	3.4	3.0	2.9	5.4	3.3	1.9	1.8	2.3	1.0	1.6	1.0	3.0	2.9	5.5	3.0	2.9	5.7	2.7	2.1	6.1	5.0	2.7	3.6	8.5	7.9	6.0	4.2	6.2	5.6	4.4	3.3	2.5	7.6	2.8	

MAIN BOARD 1/2 (CABLE Y/C SECTION)



SCHEMATIC DIAGRAM OF MAIN 2/2 (PT MICOM)

MAIN BOARD 2/2 (PT MICOM SECTION)

MAIN BOARD (2/2) (PT MICOM SECTION)

	U18	U19	U20	U21	U22	U303	U504	U501	U502	U506	U507	U510	U512	U513	U514	U518	U533	U534
1	5.1	5.1	0.1	0.1	9.0	5.1	—	5.1	5.1	0.1	0.0	2.5	0.0	5.1	0.7	5.2	0.0	5.1
2	0.1	0.1	0.1	0.1	5.0	2.3	1.4	5.1	5.1	5.2	5.1	5.0	0.0	5.1	0.6	5.2	0.0	5.0
3	2.3	2.3	0.1		0.0	2.9	2.1	2.2	2.2	5.1	3.2	0.0	5.1	0.7	1.6	0.0	5.0	
4	2.5	2.5	0.1	0.1		2.5	2.3	5.1	5.1	0.2	5.1	0.0	0.0	0.0	0.6	0.0	0.0	0.0

<INDEX>
MAIN BOARD (2/2)
(PT MICOM SECTION)

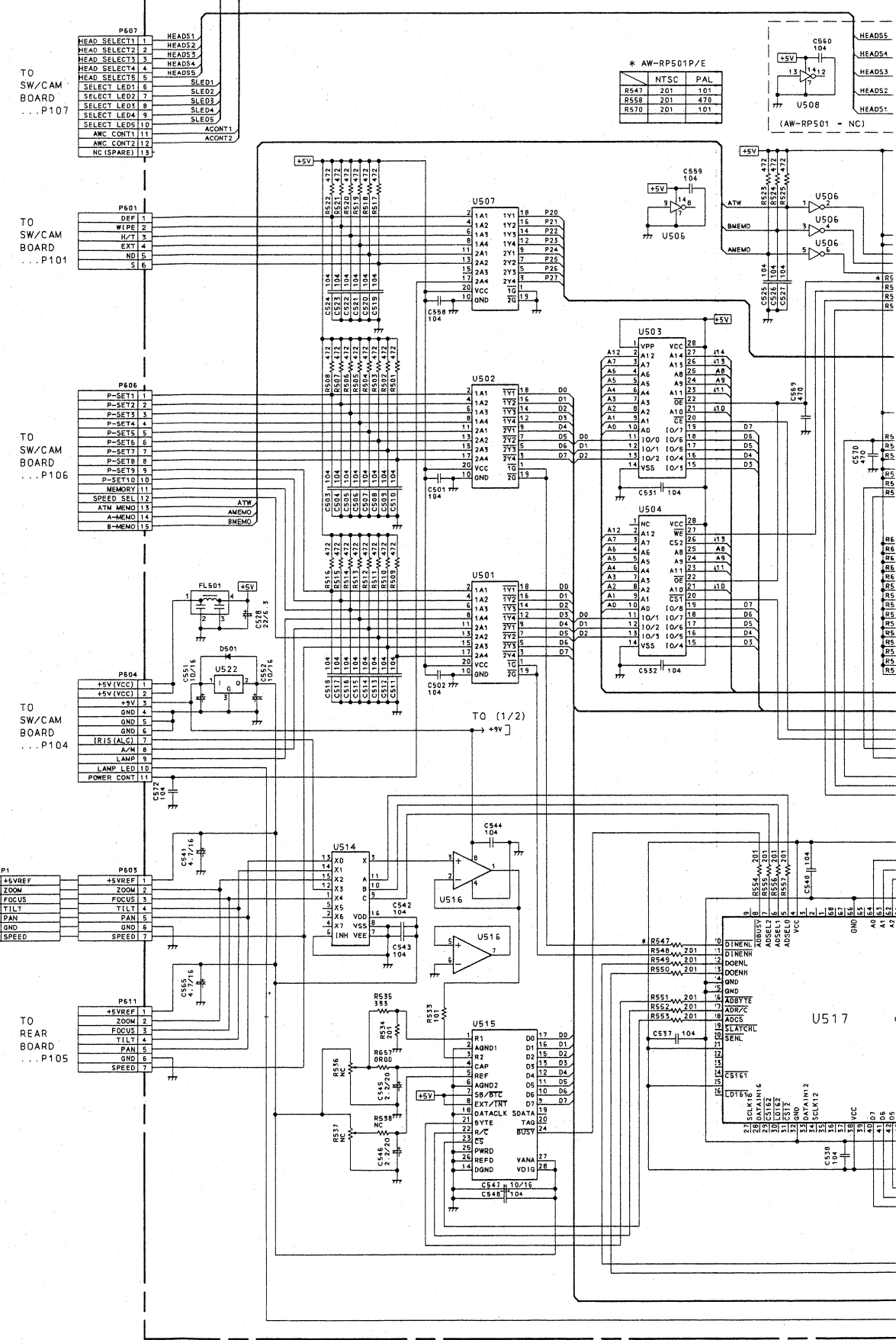
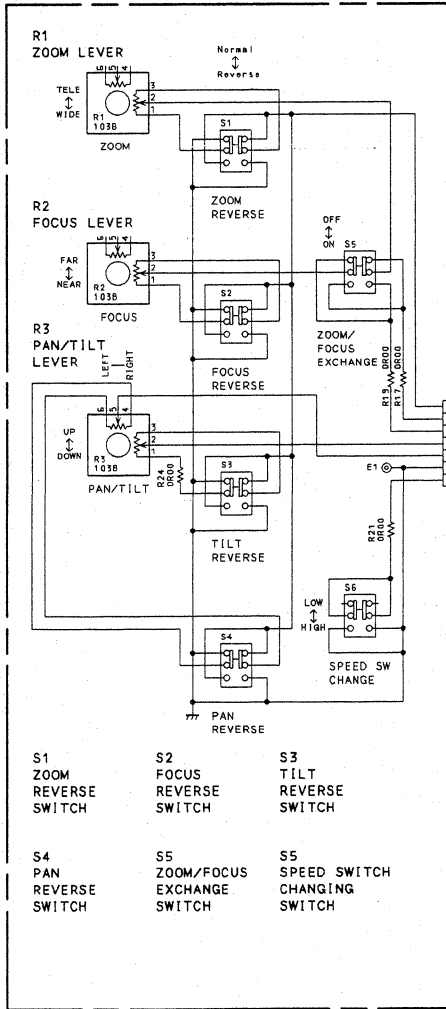
U501	C3
U502	D3
U503	D4
U504	C4
U505	D5
U506	D4
U507	D3
U508	E4,E5
U509	D7
U510	B6
U512	E6
U513	C7
U514	B3
U515	A3
U516	B3
U517	B4
U518	A6
U519	A6
U520	A6
U521	A6
U522	C2
U530	D8
U531	C8
U532	C8
U533	D8
U534	C7,C8,D7
D501	C2

MAIN BOARD (2/2) (PT MICOM SECTION)																		
	U518	U519	U520	U521	U522	U503	U504	U501	U502	U506	U507	U510	U512	U513	U514	U516	U533	U534
1	5.1	5.1	0.1	0.1	9.0	5.1	—	5.1	5.1	5.1	0.0	2.5	0.0	5.1	0.7	5.2	0.0	5.1
2	0.1	0.1	0.1	0.1	5.0	2.3	1.4	5.1	5.1	0.2	5.1	5.0	0.0	5.1	0.6	5.2	0.0	5.0
3	2.3	2.3	0.1	0.1	0.0	2.9	2.1	2.2	2.2	5.1	5.1	3.2	0.0	5.1	0.7	1.6	0.0	5.0
4	2.5	2.5	0.1	0.1		2.5	2.3	5.1	5.1	0.2	5.1	0.0	0.0	0.0	0.6	0.0	0.0	0.0
5	0.1	0.1	0.1	0.1		2.6	1.4	2.4	2.4	5.1	0.0	5.1	4.8	5.0	0.6	0.0	0.0	5.0
6	0.1	0.1	0.1	0.1		2.7	3.0	5.1	5.1	0.2	5.1	2.6	0.0	0.5	0.0	0.0	0.0	0.0
7	2.2	2.2	0.1	0.1		2.7	2.8	1.7	1.7	0.0	5.1	5.1	0.0	2.4	0.0	0.0	0.0	0.0
8	2.4	2.4	0.1	0.1		2.7	2.7	5.1	5.1	4.7	5.1	5.1	0.0	2.4	0.0	9.0	0.0	0.0
9	0.1	—	0.0	0.0		2.7	2.6	1.8	1.8	0.0	5.1		0.0		5.1		0.0	5.0
10	0.0	0.0	3.4	4.3		2.6	2.6	0.0	0.0	0.2	0.0	3.7		0.0	0.0		1.1	0.0
11	0.2	0.2	3.5	1.9		2.2	3.0	4.3	5.1	5.1	5.1	1.1		0.0			1.1	5.0
12	0.1	0.1	3.4	1.9		2.5	0.8	1.4	1.4	0.2	5.1		1.0	3.1			1.1	5.1
13	2.7	2.7	3.4	1.8		2.2	1.3	5.1	5.1	5.1	5.1		0.9		1.4		1.0	0.0
14	2.9	2.9	3.4	1.9		0.0	0.0	1.9	1.9	5.1	5.1		0.7		1.4		0.0	5.1
15	0.1	0.1	3.4	—		2.8	1.0	5.1	5.1		1.4		4.0		1.4		1.0	
16	0.1	0.1	3.4	4.3		2.6	1.9	1.0	1.0		5.1		4.3		5.0		1.0	
17	2.2	2.2	3.4	3.4		2.1	1.7	5.1	5.1		4.8		2.9				0.9	
18	2.7	2.7		3.5	3.4		2.1	2.4	2.8	2.8		5.1		4.0			—	
19	0.1	0.1				2.4	2.2	5.1	5.1		0.0							
20	5.1	5.1				0.1	5.0	5.1	5.1		5.1							
21						0.8	0.3											
22						2.1	2.0											
23						1.3	0.3											
24						0.7	0.3											
25						2.1	1.1											
26						1.2	1.8											
27						0.3	4.6											
28						5.1	5.1											

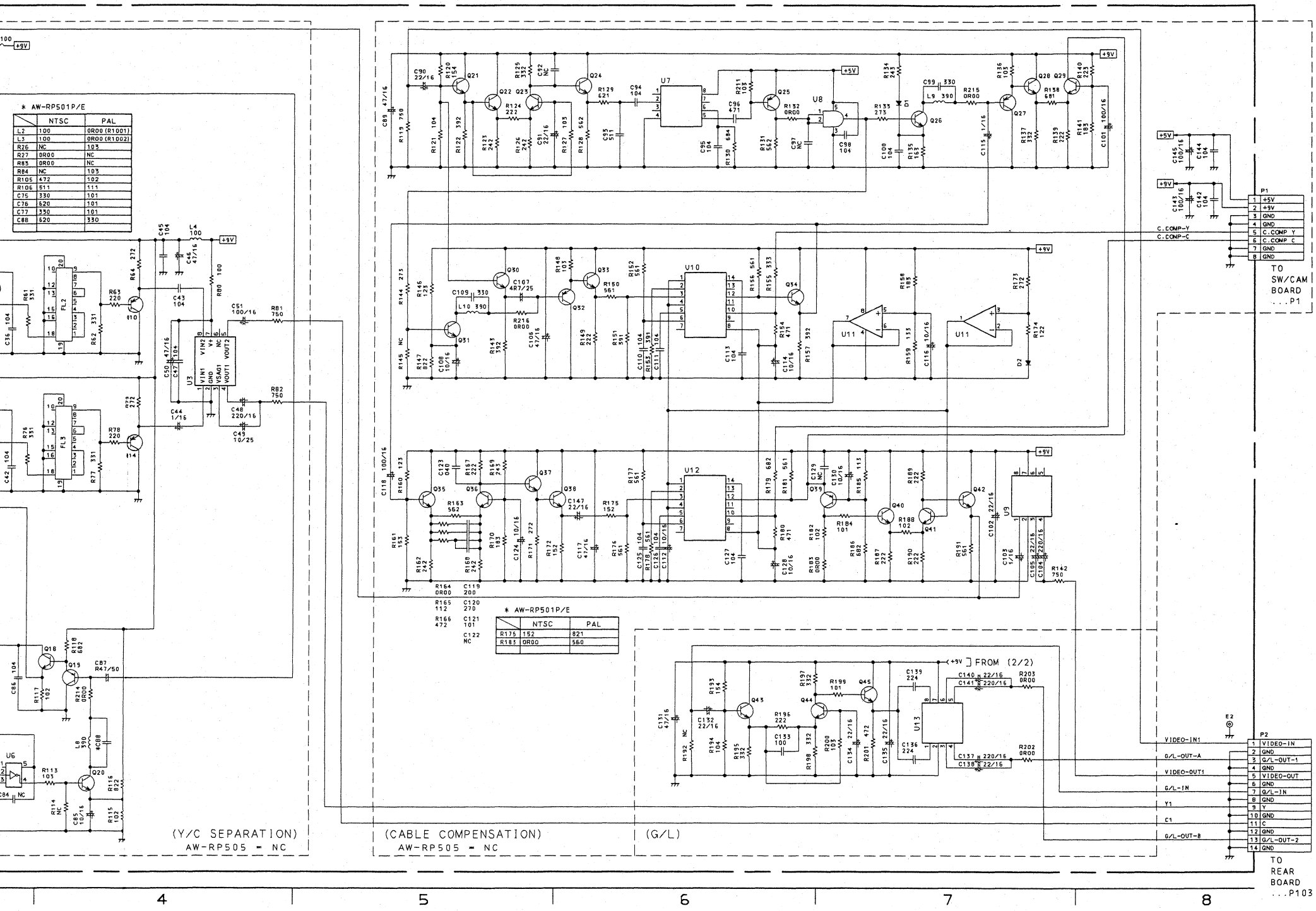
	U508	U509	U523	U525	U526	U527	U528	U529
1	2.6	4.7	0.0	5.0	5.0	5.0	5.0	5.0
2	0.2	0.0	0.0	4.8	0.1	4.8	4.8	4.7
3	2.6	0.0	0.0	5.0	5.0	5.0	5.0	5.0
4	0.2	0.0	5.0	0.0	0.0	0.0	0.0	0.0
5	2.7	0.0	0.0	4.9	4.9	4.9	4.9	4.9
6	0.2	0.0	5.0	0.5	0.5	0.5	0.5	0.5
7	0.0	0.0	5.0	2.4	2.4	2.4	2.4	2.4
8	0.2	0.0	0.0	2.4	2.4	2.4	2.4	2.4
9	2.8	0.0	5.0	—	—	—	—	—
10	0.2	4.5	5.0	—	—	—	—	—
11	2.9	2.0	5.0	—	—	—	—	—
12	4.7	2.0	5.0	—	—	—	—	—
13	0.0	2.0	5.0	—	—	—	—	—
14	5.0	4.5	5.0	—	—	—	—	—
15	—	4.6	5.0	—	—	—	—	—
16	—	4.6	5.0	—	—	—	—	—
17	—	4.6	—	—	—	—	—	—
18	—	0.7	—	—	—	—	—	—

E
D
C
B
A

JOYSTICK BOARD



1 OF MAIN BOARD 1/2 (CABLE Y / C SECTION)



Note: The value indicated in the schematic diagram should be read as follows

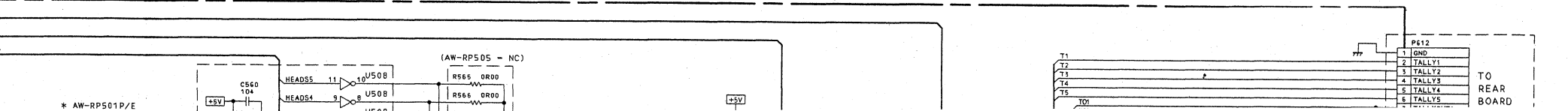
Multiplier (0 - 5)
2nd. Significant Digit (0 - 9)
1st. Significant Digit (1 - 9)

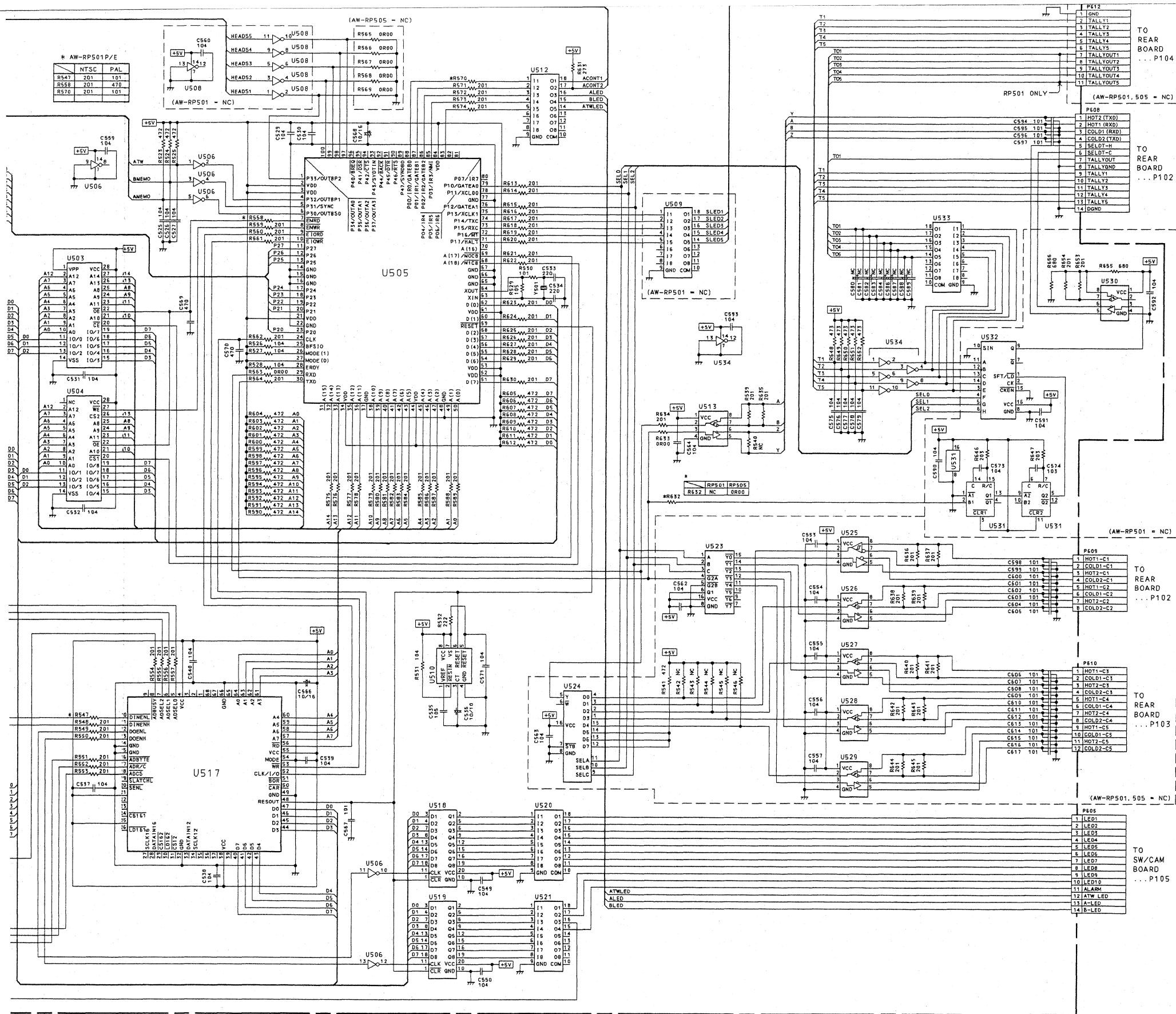
<Example>

For Resistor:
330 $\rightarrow 33 \times 10^0 = 33 \Omega$
561 $\rightarrow 56 \times 10^1 = 560 \Omega$
123 $\rightarrow 12 \times 10^3 = 12k \Omega$
0R00 = 0 Ω

For Capacitor:
820 $\rightarrow 82 \times 10^0 = 82 pF$
102 $\rightarrow 10 \times 10^2 = 1000 pF = 0.001 \mu F$
104 $\rightarrow 10 \times 10^4 = 100000 pF = 0.1 \mu F$
The suffix attached to capacitance indicates a type of capacitor.

MAIN 2/2 (PT MICOM SECTION) / JOYSTICK BOARD SECTION)





Note: The value indicated in the schematic diagram should be read as follows

☐ Multiplier (0 - 5)
☐ 2nd. Significant Digit (0 - 9)
☐ 1st. Significant Digit (1 - 9)

<Example>

For Resistor:

330 → $33 \times 10^0 = 33 \Omega$
 561 → $56 \times 10^1 = 560 \Omega$
 123 → $12 \times 10^3 = 12k \Omega$
 0R00 = 0Ω

For Capacitor:

820 → $82 \times 10^0 = 82 pF$
 102 → $10 \times 10^2 = 1000 pF = 0.001 \mu F$
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The suffix attached to capacitance indicates a type of capacitor.

<INDEX>
MAIN BOARD

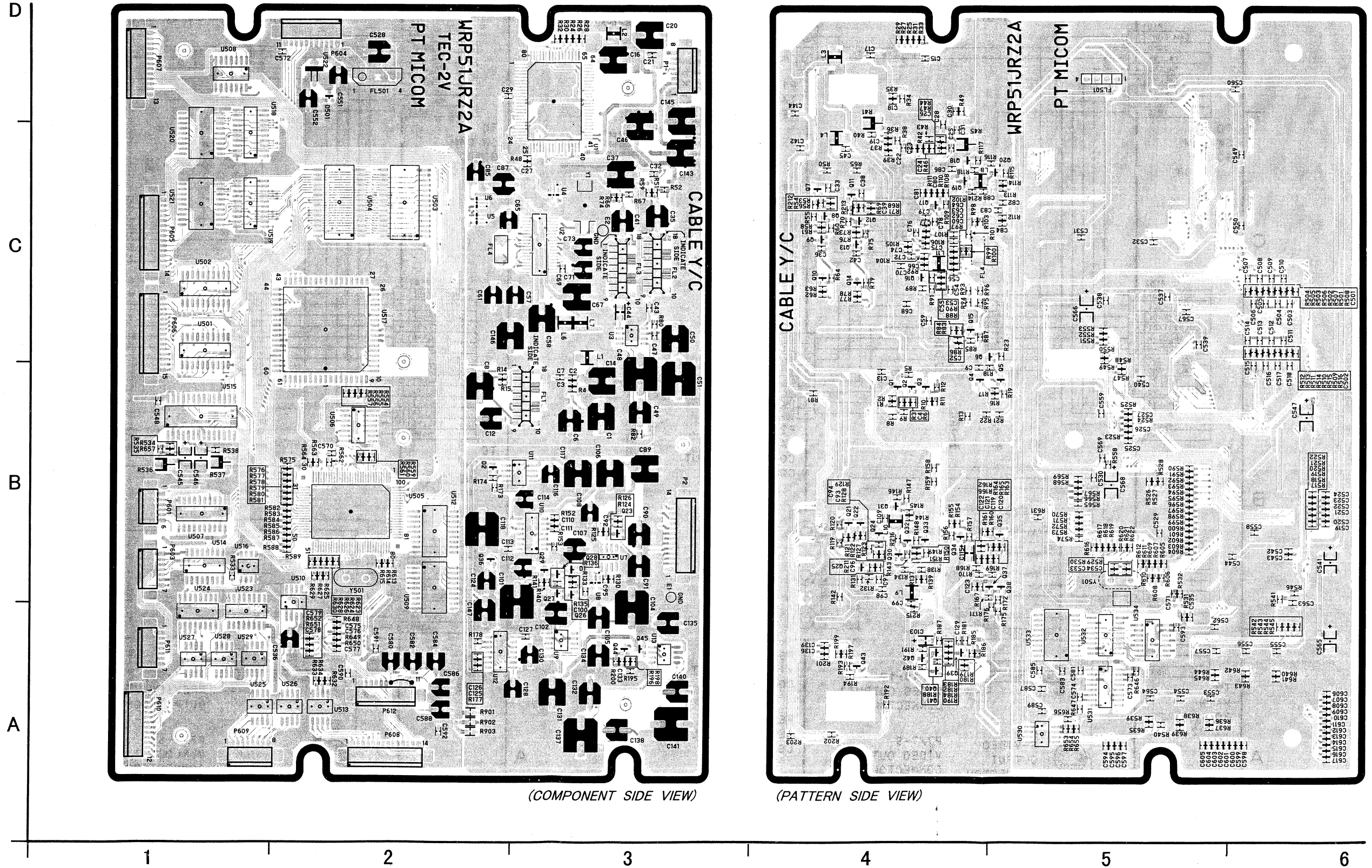
U1	D3
U2	C3
U3	C3
U4	C3
U5	C2
U6	C2
U7	B3
U8	B3
U9	A3
U10	B3
U11	B3
U12	A2
U13	A3
U501	C1
U502	C1
U503	C2
U504	C2
U505	B2
U506	B2
U507	B1
U508	D1
U509	B2
U510	B2
U512	B2
U513	A2
U514	B1
U515	B1
U516	B1
U517	C2
U518	C1
U519	C1
U520	C1
U521	D2
U522	B1
U523	A1
U524	A1
U525	A1
U526	A2
U527	A1
U528	A1
U529	A1
U530	A5
U531	A5
U532	A5
U533	A5
U534	A5

Q1	Q1
Q2	Q2
Q3	Q3
Q4	Q4
Q5	Q5
Q6	Q6
Q7	Q7
Q8	Q8
Q9	Q9
Q10	Q10
Q11	Q11
Q12	Q12
Q13	Q13
Q14	Q14
Q15	Q15
Q16	Q16
Q17	Q17
Q18	Q18
Q19	Q19
Q20	Q20
Q21	Q21
Q22	Q22
Q23	Q23
Q24	Q24
Q25	Q25
Q26	Q26
Q27	Q27
Q28	Q28
Q29	Q29
Q30	Q30
Q31	Q31
Q32	Q32
Q33	Q33
Q34	Q34
Q35	Q35
Q36	Q36
Q37	Q37
Q38	Q38
Q39	Q39
Q40	Q40
Q41	Q41
Q42	Q42
Q43	Q43
Q44	Q44
Q45	Q45

D1	D1
D2	D2
D501	D501

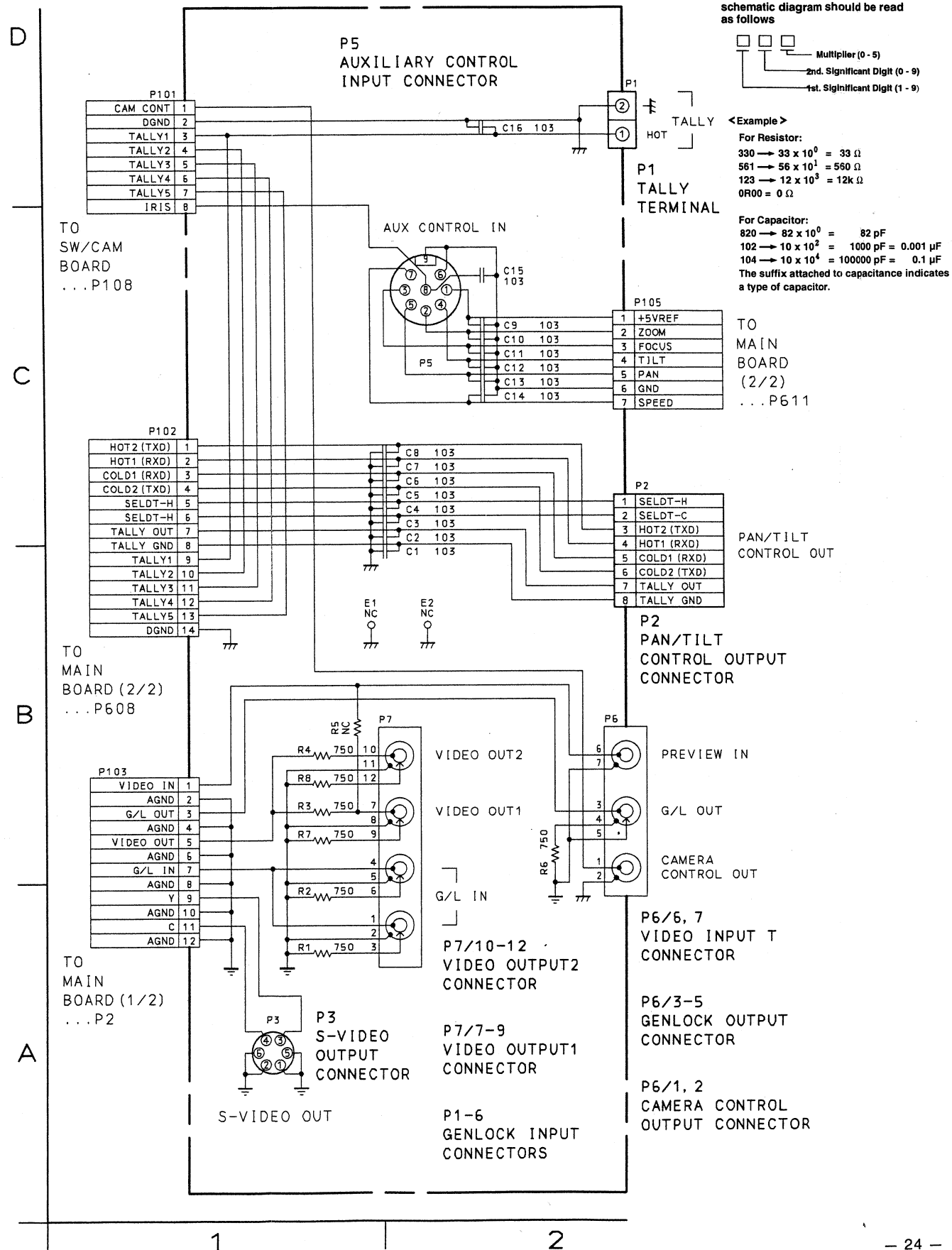
CONDUCTOR VIEW OF MAIN BOARD

MAIN BOARD

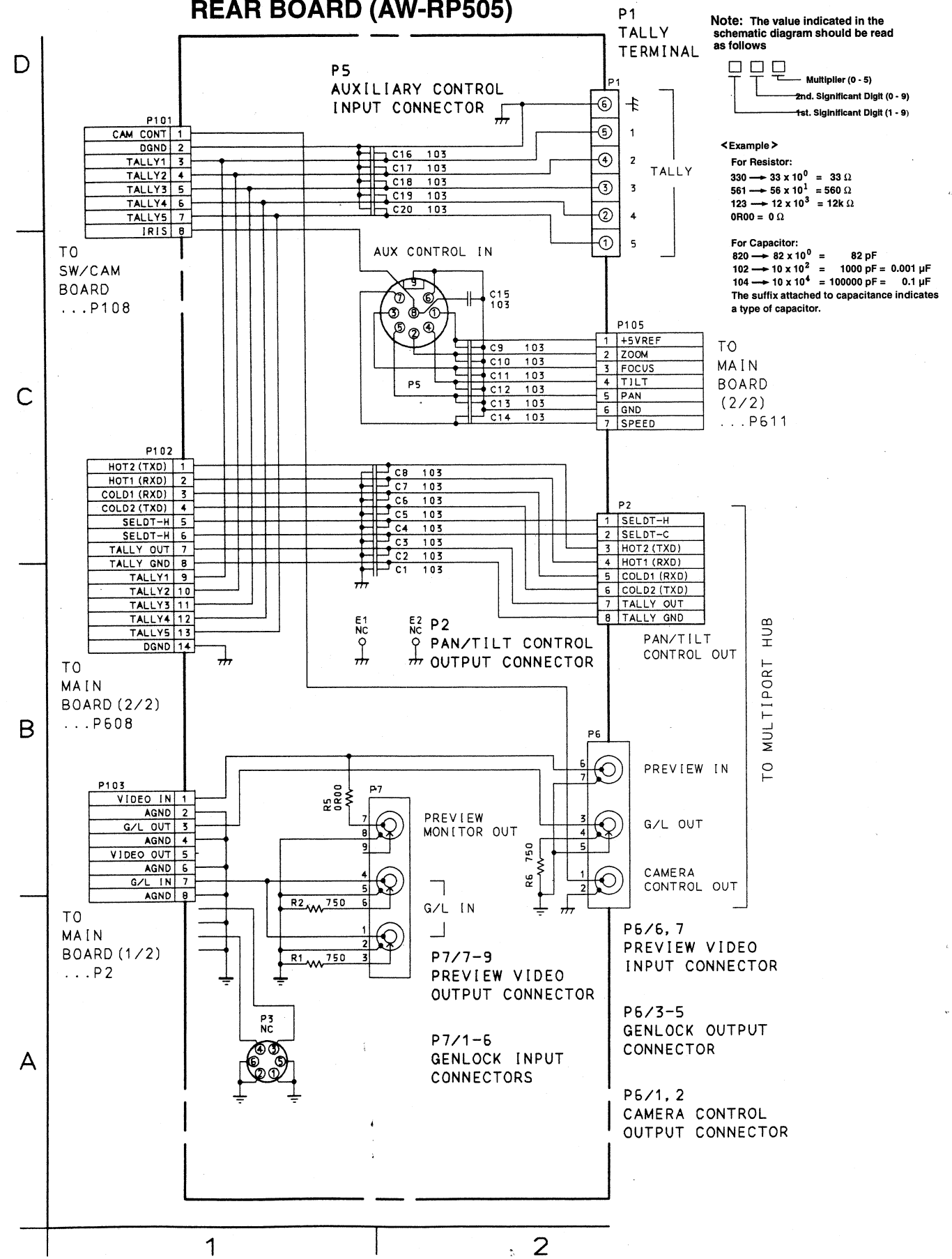


SCHEMATIC DIAGRAM OF REAR BOARD

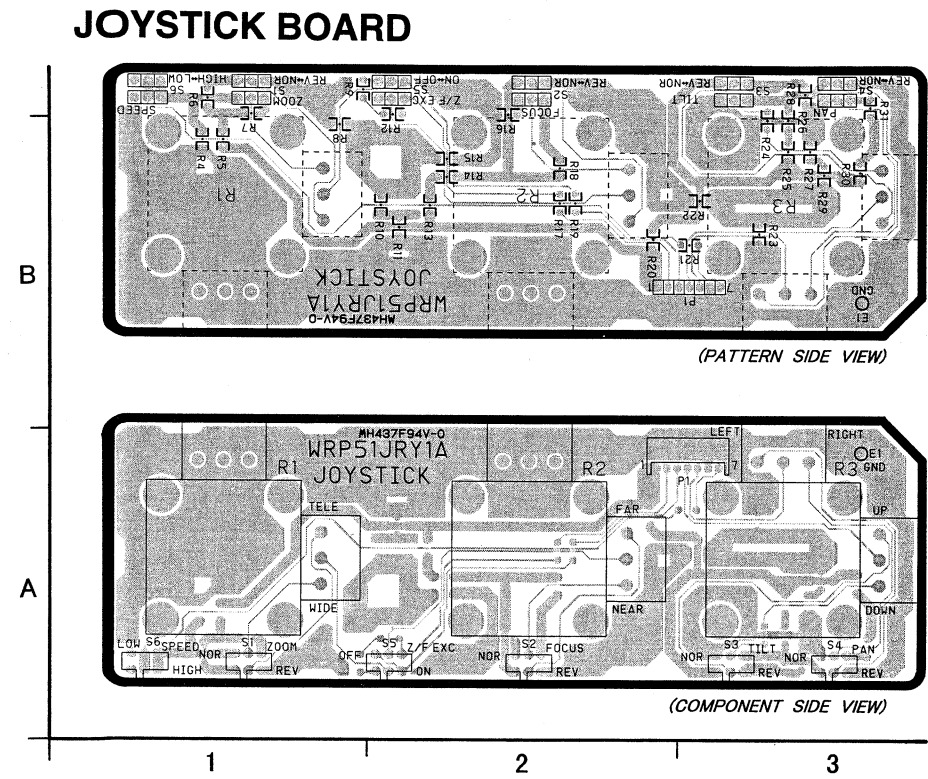
REAR BOARD (AW-RP501)



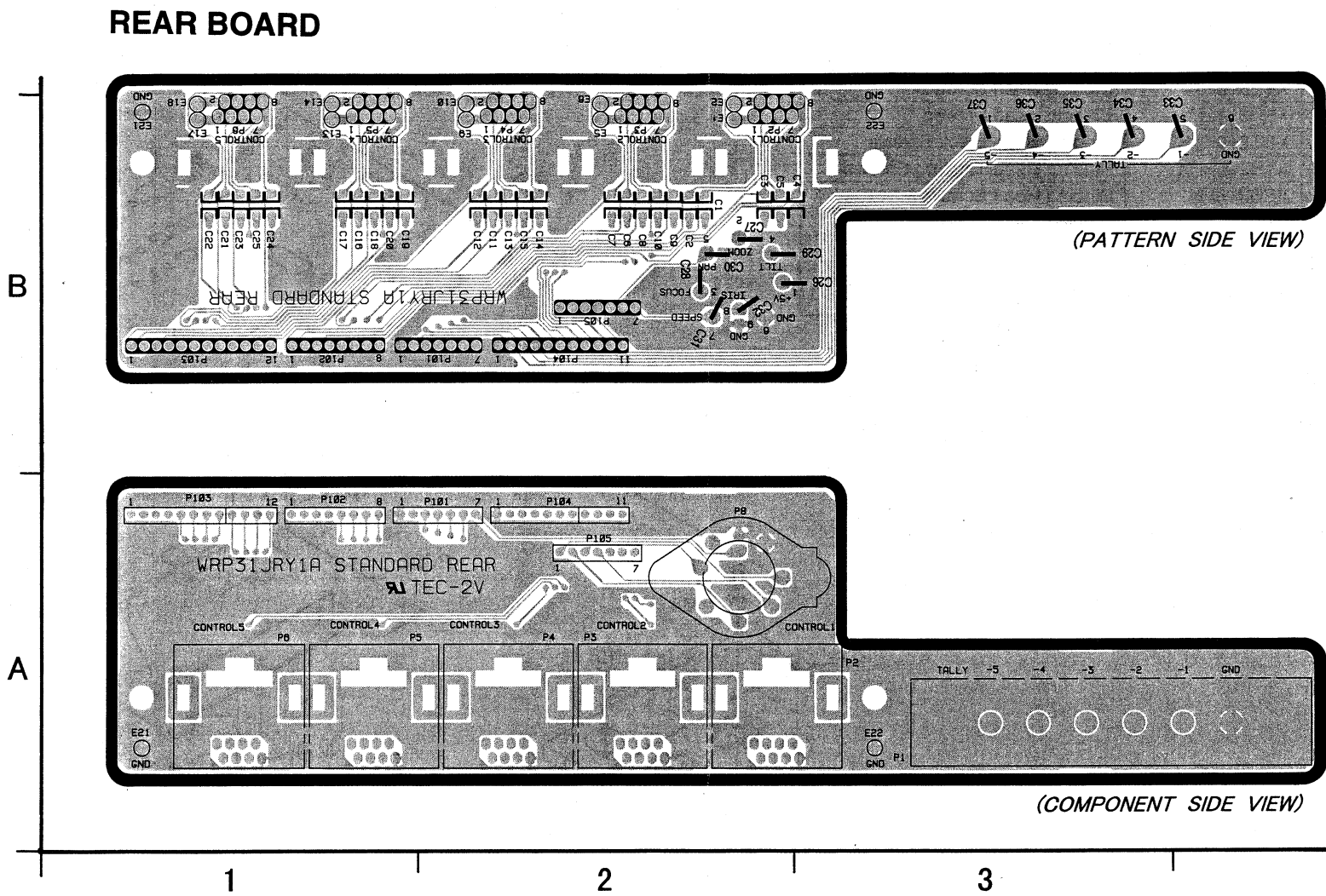
REAR BOARD (AW-RP505)



CONDUCTOR VIEW OF JOYSTICK BOARD



CONDUCTOR VIEW OF REAR BOARD



REPLACEMENT PARTS LIST

Important Notice

- Components identified by "△" mark have special characteristics important for safety.
When replacing any of these components, use only manufacturer's specified parts.
- RTL : Retention Time Limited (No longer available after discontinuing product).

REF. NO.	PART NO.	DESCRIPTION	REF. NO.	PART NO.	DESCRIPTION
AW-RP501			MAIN BOARD		
MISCELLANEOUS			PCB1 (RTL)	YWWRP51JKZ2A	Printed Circuit Board Assy for AW-RP501/USA/Canada
				YWWRP51EKZ2A	Printed Circuit Board Assy for AW-RP501/B/G
U101	YWNJM7809FA	IC	U1	YWCXD2044Q	IC
U102	YWNJM7805FA	IC	U2	YWUPC1862GS	IC
U103	YWNJM7809FA	IC	U3	NJM2268M	IC
U104	YWNJM7805FA	IC	U4-6	YWTC7S04FL	IC
U105	HN27C256AFP	Memory Device (ROM)	U7	YWLM1881M	IC
J101	HEC075701003	DC Jack	U8	YWTC7S08FL	IC
CN101	YWM0092	8-pin DIN Connector	U9	YWNJM2267M	IC
CN102	AXS62822	IC Socket Guide	U10	NJM1496M	IC
E101	ML40S1CXS2P	2-pin Terminal	U11	TL092CPS	IC
E102	YWCP501CP01B	Wire	U12	NJM1496M	IC
E103	YWCP501CP02B	Wire	U13	YWNJM2267M	IC
E104	YWCP501CP03B	Wire	U501,502	MC74HC240AF	IC
E105	YWP501CP03B	Wire	U504	YWHM6264BLFP	IC
E106	YWCP501CP04B	Wire	U505	KL5C8012CFP	IC
M1	YW1B1A465A	Joystick Angle	U506	SN74LS04NS	IC
M2	YVV5RA0278A4	Joystick Knob	U507	MC74HC244AF	IC
M3	YW2Y1A021A	Joystick Collar	U510	YWTL7705CPS	IC
M4	YW5N1A022A	Joystick Cover	U512	YWTD62083F	IC
M6	YW1A1A058B	Cover	U513	YWSN75179BPS	IC
M7	YW2R1A015A	Iris Knob	U514	MC74HC4051F	IC
M8	YWTD446MR07A	Button Guide	U515	YWADS7806U	IC
M9	YWA6JG0016A3	Button (WHT)	U516	NJM2904M	IC
M10	YWA6JC0017A4	Button Guide (N4)	U517	PTFPGA1	IC
M12	YW5E1A017A	Switch Cushion (A)	U518,519	SN74ALS273NS	IC
M13	YW5E1A018A	Switch Cushion (B)	U520,521	YWTD62083F	IC
M14	YWWLS160	Locking Spacer	U522	YW78L05UATE2	IC
M15	YW2Y1A022A	Spacer	U533	YWTD62083F	IC
M17	YW1A1A054A	Chassis	U534	YWMC74HC04AF	IC
M18	SJ-5003	Rubber Foot	Q1	2SD1819QRS	Transistor
M19	YW1A1A065A	Blank Panel	Q2	2SC3931-CD	Transistor
M20	YW1A1A062B	Rear Panel	Q3,4	2SD1819QRS	Transistor
M21	YVV2GA0065A4	Cord Clamp	Q5	2SC3931-CD	Transistor
M23 △	YW7C1A028A	Main Label for AW-RP501/USA/Canada	Q6,7	2SD1819QRS	Transistor
	YW7C1A029A	Main Label for AW-RP501/B/G	Q8	2SC3931-CD	Transistor
M24 △	YFV7MA0061A4	FCC Label for AW-RP501/USA/Canada	Q9	2SD1819QRS	Transistor
M27 △	YVV7MA0338A4	See Manual Label	Q10	2SB1218QRS	Transistor
M25 △	YVV7MA1009A4	EXT DC Label	Q11	2SD1819QRS	Transistor
M26 △	YFV7MB0099A4	Screw Caution Label			

REF. NO.	PART NO.	DESCRIPTION	REF. NO.	PART NO.	DESCRIPTION
Q12	2SC3931-CD	Transistor	R25	ERJ3GEY0R00	Carbon 0 ohm 1/16W
Q13	2SD1819QRS	Transistor	R26	ERJ3GEYJ103	Carbon 10K ohms 1/16W
Q14,15	2SB1218QRS	Transistor			for AW-RP501/B/G
Q16-18	2SD1819QRS	Transistor	R27	ERJ3GEY0R00	Carbon 0 ohm 1/16W
Q19	2SB1218QRS	Transistor			for AW-RP501/USA/Canada
Q20	2SC3931-CD	Transistor	R28	ERJ3GEYJ103	Carbon 10K ohms 1/16W
Q21,22	2SD1819QRS	Transistor	R31,33	ERJ3GEY0R00	Carbon 0 ohm 1/16W
Q23	2SC3931-CD	Transistor	R35	ERJ3GEYJ103	Carbon 10K ohms 1/16W
Q24	2SD1819QRS	Transistor	R36	ERJ3RHD332	Metal 3.3K ohms 1/16W
Q25	2SB1218QRS	Transistor	R37	ERJ3GEYJ102	Carbon 1K ohms 1/16W
Q26	2SC3931-CD	Transistor	R38,39	ERJ3RHD102	Metal 1K ohms 1/16W
Q27	2SA1532-CD	Transistor for AW-RP501/USA/Canada	R42	ERJ3RHD332	Metal 3.3K ohms 1/16W
	2SB1218QRS	Transistor for AW-RP501/B/G	R43	ERJ3GEYJ102	Carbon 1K ohms 1/16W
Q28	2SD1819QRS	Transistor	R46	ERJ3RHD102	Metal 1K ohms 1/16W
Q29	2SC3931-CD	Transistor	R47	ERJ3RHD132	Metal 1.3K ohms 1/16W
Q30	2SD1819QRS	Transistor	R48	ERJ3GEYJ750	Carbon 75 ohms 1/16W
Q31	2SC3931-CD	Transistor	R49	ERJ3GEYJ103	Carbon 10K ohms 1/16W
Q32	2SA1532-CD	Transistor for AW-RP501/USA/Canada	R50	ERJ3RHD201	Metal 200 ohms 1/16W
	2SB1218QRS	Transistor for AW-RP501/B/G	R51	ERJ3GEYJ103	Carbon 10K ohms 1/16W
Q33-35	2SD1819QRS	Transistor	R52	ERJ3GEYJ220	Carbon 22 ohms 1/16W
Q36	2SC3931-CD	Transistor	R53	ERJ3GEYJ392	Carbon 3.9K ohms 1/16W
Q37,38	2SD1819QRS	Transistor	R54	ERJ3RHD242	Metal 2.4K ohms 1/16W
Q39	2SA1532-CD	Transistor	R55	ERJ3RHD392	Metal 3.9K ohms 1/16W
Q40	2SD1819QRS	Transistor for AW-RP501/USA/Canada	R56	ERJ3GEYJ392	Carbon 3.9K ohms 1/16W
	2SC3931-CD	Transistor for AW-RP501/B/G	R58	ERJ3GEYJ752	Carbon 7.5K ohms 1/16W
Q41	2SC3931-CD	Transistor	R59	ERJ3GEYJ512	Carbon 5.1K ohms 1/16W
Q42,43	2SD1819QRS	Transistor	R60	ERJ3GEYJ562	Carbon 5.6K ohms 1/16W
Q44	2SC3931-CD	Transistor	R61,62	ERJ3RHD331	Metal 330 ohms 1/16W
Q45	2SD1819QRS	Transistor	R63	ERJ3GEYJ220	Carbon 22 ohms 1/16W
D1,2	MA142K	Diode	R64	ERJ3GEYJ272	Carbon 2.7K ohms 1/16W
D501	MA142K	Diode	R65	ERJ3RHD201	Metal 200 ohms 1/16W
R1	ERJ3GEYJ103	Carbon 10K ohms 1/16W	R66	ERJ3GEYJ103	Carbon 10K ohms 1/16W
R2	ERJ3GEYJ220	Carbon 22 ohms 1/16W	R67	ERJ3GEYJ220	Carbon 22 ohms 1/16W
R3	ERJ3GEYJ392	Carbon 3.9K ohms 1/16W	R68	ERJ3GEYJ392	Carbon 3.9K ohms 1/16W
R4	ERJ3RHD202	Metal 2K ohms 1/16W	R69	ERJ3RHD332	Metal 3.3K ohms 1/16W
R5	ERJ3RHD392	Metal 3.9K ohms 1/16W	R70	ERJ3RHD392	Metal 3.9K ohms 1/16W
R6	ERJ3GEYJ392	Carbon 3.9K ohms 1/16W	R71	ERJ3GEYJ392	Carbon 3.9K ohms 1/16W
R8	ERJ3GEYJ752	Carbon 7.5K ohms 1/16W	R73	ERJ3GEYJ752	Carbon 7.5K ohms 1/16W
R9	ERJ3GEYJ512	Carbon 5.1K ohms 1/16W	R74	ERJ3GEYJ512	Carbon 5.1K ohms 1/16W
R10,11	ERJ3GEYJ362	Carbon 3.6K ohms 1/16W	R75	ERJ3GEYJ562	Carbon 5.6K ohms 1/16W
R12,13	ERJ3RHD331	Metal 330 ohms 1/16W	R76,77	ERJ3RHD331	Metal 330 ohms 1/16W
R14	ERJ3GEYJ103	Carbon 10K ohms 1/16W	R78	ERJ3GEYJ220	Carbon 22 ohms 1/16W
R15	ERJ3GEYJ220	Carbon 22 ohms 1/16W	R79	ERJ3GEYJ272	Carbon 2.7K ohms 1/16W
R16	ERJ3GEYJ392	Carbon 3.9K ohms 1/16W	R80	ERJ3GEYJ100	Carbon 10 ohms 1/16W
R17	ERJ3RHD182	Metal 1.8K ohms 1/16W	R81,82	ERJ3GEYF750	Carbon 75 ohms 1/16W
R18	ERJ3RHD392	Metal 3.9K ohms 1/16W	R83	ERJ3GEY0R00	Carbon 0 ohm 1/16W
R19	ERJ3GEYJ392	Carbon 3.9K ohms 1/16W			for AW-RP501/USA/Canada
R21	ERJ3GEYJ752	Carbon 7.5K ohms 1/16W	R84	ERJ3GEYJ103	Carbon 10K ohms 1/16W
R22	ERJ3GEYJ512	Carbon 5.1K ohms 1/16W			for AW-RP501/B/G
R23	ERJ3GEYJ562	Carbon 5.6K ohms 1/16W	R85	ERJ3GEYJ103	Carbon 10K ohms 1/16W

REF. NO.	PART NO.	DESCRIPTION		REF. NO.	PART NO.	DESCRIPTION	
R86	ERJ3GEYJ333	Carbon	33K ohms 1/16W	R132	ERJ3GEY0R00	Carbon	0 ohm 1/16W
R87	ERJ3GEYJ102	Carbon	1K ohms 1/16W	R133	ERJ3GEYJ273	Carbon	27K ohms 1/16W
R88	ERJ3GEYJ331	Carbon	330 ohms 1/16W	R134	ERJ3RHD243	Metal	24K ohms 1/16W
R89	ERJ3GEYJ103	Carbon	10K ohms 1/16W	R135	ERJ3RHD163	Metal	16K ohms 1/16W
R90	ERJ3GEYJ681	Carbon	680 ohms 1/16W	R136	ERJ3GEYJ103	Carbon	10K ohms 1/16W
R91	ERJ3GEYJ103	Carbon	10K ohms 1/16W	R137	ERJ3GEYJ332	Carbon	3.3K ohms 1/16W
R92	ERJ3GEYJ681	Carbon	680 ohms 1/16W	R138	ERJ3GEYJ681	Carbon	680 ohms 1/16W
R93	ERJ3GEYJ221	Carbon	220 ohms 1/16W	R139	ERJ3GEYJ222	Carbon	2.2K ohms 1/16W
R94,95	ERJ3GEYJ473	Carbon	47K ohms 1/16W	R140	ERJ3GEYJ223	Carbon	22K ohms 1/16W for AW-RP501/USA/Canada
R96	ERJ3GEYJ221	Carbon	220 ohms 1/16W				
R97	ERJ3GEYJ104	Carbon	100K ohms 1/16W		ERJ3RHD223	Metal	22K ohms 1/16W for AW-RP501/B/G
R98	ERJ3GEYJ152	Carbon	1.5K ohms 1/16W	R141	ERJ3GEYJ183	Carbon	18K ohms 1/16W for AW-RP501/USA/Canada
R99	ERJ3GEYJ222	Carbon	2.2K ohms 1/16W		ERJ3RHD183	Metal	18K ohms 1/16W for AW-RP501/B/G
R100	ERJ3GEYJ271	Carbon	270 ohms 1/16W				
R101	ERJ3GEYJ272	Carbon	2.7K ohms 1/16W				
R102	ERJ3GEY0R00	Carbon	0 ohm 1/16W	R142	ERJ3GEY0R00	Carbon	0 ohm 1/16W
R103	ERJ3GEYJ822	Carbon	8.2K ohms 1/16W	R143	ERJ3GEYJ392	Carbon	3.9K ohms 1/16W
R104	ERJ3GEYJ105	Carbon	1M ohms 1/16W	R144	ERJ3GEYJ273	Carbon	27K ohms 1/16W
R105	ERJ3GEYJ472	Carbon	4.7K ohms 1/16W for AW-RP501/USA/Canada	R146	ERJ3GEYJ123	Carbon	12K ohms 1/16W
	ERJ3GEYJ102	Carbon	1K ohms 1/16W for AW-RP501/B/G	R147	ERJ3GEYJ822	Carbon	8.2K ohms 1/16W
R106	ERJ3GEYJ511	Carbon	510 ohms 1/16W for AW-RP501/USA/Canada	R148	ERJ3GEYJ103	Carbon	10K ohms 1/16W
	ERJ3GEYJ111	Carbon	110 ohms 1/16W for AW-RP501/B/G	R149	ERJ3GEYJ222	Carbon	2.2K ohms 1/16W
				R150	ERJ3GEYJ561	Carbon	560 ohms 1/16W
				R151	ERJ3GEYJ391	Carbon	390 ohms 1/16W
R107	ERJ3GEYJ101	Carbon	100 ohms 1/16W	R152	ERJ3GEYJ561	Carbon	560 ohms 1/16W
R108	ERJ3GEYJ472	Carbon	4.7K ohms 1/16W	R153	ERJ3GEYJ391	Carbon	390 ohms 1/16W
R109	ERJ3GEYJ151	Carbon	150 ohms 1/16W	R154	ERJ3GEYJ471	Carbon	470 ohms 1/16W
R110	ERJ3GEYJ681	Carbon	680 ohms 1/16W	R155	ERJ3GEYJ333	Carbon	33K ohms 1/16W
				R156	ERJ3GEYJ561	Carbon	560 ohms 1/16W
R111	ERJ3GEYJ105	Carbon	1M ohms 1/16W	R157	ERJ3GEYJ392	Carbon	3.9K ohms 1/16W
R112	ERJ3GEYJ102	Carbon	1K ohms 1/16W	R158	ERJ3GEYJ183	Carbon	18K ohms 1/16W
R113	ERJ3GEYJ103	Carbon	10K ohms 1/16W	R159	ERJ3GEYJ133	Carbon	13K ohms 1/16W
R115	ERJ3GEYJ102	Carbon	1K ohms 1/16W	R160	ERJ3GEYJ123	Carbon	12K ohms 1/16W
R116	ERJ3GEYJ822	Carbon	8.2K ohms 1/16W	R161	ERJ3GEYJ153	Carbon	15K ohms 1/16W
R117	ERJ3GEYJ102	Carbon	1K ohms 1/16W	R162	ERJ3GEYJ242	Carbon	2.4K ohms 1/16W
R118	ERJ3GEYJ682	Carbon	6.8K ohms 1/16W	R163	ERJ3RHD562	Metal	5.6K ohms 1/16W
R119	ERJ3GEYJ750	Carbon	75 ohms 1/16W	R164	ERJ3GEY0R00	Carbon	0 ohm 1/16W
R120	ERJ3GEYJ154	Carbon	150K ohms 1/16W	R165	ERJ3RHD112	Metal	1.1K ohms 1/16W
R121	ERJ3GEYJ104	Carbon	100K ohms 1/16W	R166	ERJ3RHD472	Metal	4.7K ohms 1/16W
R122	ERJ3GEYJ392	Carbon	3.9K ohms 1/16W	R167	ERJ3GEYJ222	Carbon	2.2K ohms 1/16W
R123	ERJ3GEYJ242	Carbon	2.4K ohms 1/16W	R168	ERJ3GEYJ242	Carbon	2.4K ohms 1/16W
R124	ERJ3GEYJ222	Carbon	2.2K ohms 1/16W	R169	ERJ3GEYJ243	Carbon	24K ohms 1/16W
R125	ERJ3GEYJ332	Carbon	3.3K ohms 1/16W	R170	ERJ3GEYJ183	Carbon	18K ohms 1/16W
R126	ERJ3GEYJ242	Carbon	2.4K ohms 1/16W	R171	ERJ3GEYJ272	Carbon	2.7K ohms 1/16W
R127	ERJ3GEYJ103	Carbon	10K ohms 1/16W	R172	ERJ3GEYJ152	Carbon	1.5K ohms 1/16W
R128	ERJ3GEYJ562	Carbon	5.6K ohms 1/16W	R173	ERJ3GEYJ272	Carbon	2.7K ohms 1/16W for AW-RP501/USA/Canada
R129	ERJ3GEYJ621	Carbon	620 ohms 1/16W		ERJ3RHD272	Metal	2.7K ohms 1/16W for AW-RP501/B/G
R130	ERJ3GEYJ684	Carbon	680K ohms 1/16W				
R131	ERJ3GEYJ562	Carbon	5.6K ohms 1/16W				

REF. NO.	PART NO.	DESCRIPTION	REF. NO.	PART NO.	DESCRIPTION
R174	ERJ3GEYJ122	Carbon 1.2K ohms 1/16W for AW-RP501/USA/Canada	R534	ERJ3GEYJ201	Carbon 200 ohms 1/16W
	ERJ3RHD122	Metal 1.2K ohms 1/16W for AW-RP501/B/G	R535	ERJ3GEYJ333	Carbon 33K ohms 1/16W
R175	ERJ3GEYJ152	Carbon 1.5K ohms 1/16W for AW-RP501/USA/Canada	R539	ERJ3GEYJ201	Carbon 200 ohms 1/16W
	ERJ3RHD821	Metal 820 ohms 1/16W for AW-RP501/B/G	R547	ERJ3GEYJ201	Carbon 200 ohms 1/16W for AW-RP501/USA/Canada
R176-178	ERJ3GEYJ561	Carbon 560 ohms 1/16W		ERJ3GEYJ101	Carbon 100 ohms 1/16W for AW-RP501/B/G
R179	ERJ3GEYJ682	Carbon 6.8K ohms 1/16W	R548-557	ERJ3GEYJ201	Carbon 200 ohms 1/16W
R180	ERJ3GEYJ471	Carbon 470 ohms 1/16W	R558	ERJ3GEYJ470	Carbon 47 ohms 1/16W for AW-RP501/B/G
R181	ERJ3GEYJ561	Carbon 560 ohms 1/16W for AW-RP501/USA/Canada	R559-562	ERJ3GEYJ201	Carbon 200 ohms 1/16W
	ERJ3RHD561	Metal 560 ohms 1/16W for AW-RP501/B/G	R563	ERJ3GEY0R00	Carbon 0 ohm 1/16W
R182	ERJ3GEYJ102	Carbon 1K ohms 1/16W for AW-RP501/USA/Canada	R564	ERJ3GEYJ201	Carbon 200 ohms 1/16W
	ERJ3RHD102	Metal 1K ohms 1/16W for AW-RP501/B/G	R565-569	ERJ3GEY0R00	Carbon 0 ohm 1/16W
R183	ERJ3GEY0R00	Carbon 0 ohm 1/16W for AW-RP501/USA/Canada	R570	ERJ3GEYJ201	Carbon 200 ohms 1/16W for AW-RP501/USA/Canada
	ERJ3RHD560	Carbon 56 ohms 1/16W for AW-RP501/B/G		ERJ3GEYJ101	Carbon 100 ohms 1/16W for AW-RP501/B/G
R184	ERJ3GEYJ101	Carbon 100 ohms 1/16W	R571-589	ERJ3GEYJ201	Carbon 200 ohms 1/16W
R185	ERJ3RHD113	Metal 11K ohms 1/16W	R590-612	ERJ3GEYJ472	Carbon 4.7K ohms 1/16W
R186	ERJ3RHD682	Metal 6.8K ohms 1/16W	R613-630	ERJ3GEYJ201	Carbon 200 ohms 1/16W
R187	ERJ3GEYJ222	Carbon 2.2K ohms 1/16W	R631	ERJ3GEYJ273	Carbon 27K ohms 1/16W
R188	ERJ3GEYJ102	Carbon 1K ohms 1/16W	R632,633	ERJ3GEY0R00	Carbon 0 ohm 1/16W
R189,190	ERJ3GEYJ222	Carbon 2.2K ohms 1/16W	R634,635	ERJ3GEYJ201	Carbon 200 ohms 1/16W
R191	ERJ3GEYJ562	Carbon 5.6K ohms 1/16W	R648-652	ERJ3GEYJ473	Carbon 47K ohms 1/16W
R193	ERJ3GEYJ154	Carbon 150K ohms 1/16W	R657	ERJ3GEY0R00	Carbon 0 ohm 1/16W
R194	ERJ3GEYJ104	Carbon 100K ohms 1/16W	R1001,1002	ERJ6GEY0R00	Carbon 0 ohm 1/16W for AW-RP501/B/G
R195	ERJ3GEYJ332	Carbon 3.3K ohms 1/16W	C1	YWRVS1C470M	Electrolytic 47 μ F 16V
R196	ERJ3GEYJ222	Carbon 2.2K ohms 1/16W	C2,4	YGM1F104Z1ET	Ceramic 0.1 μ F 25V
R197,198	ERJ3GEYJ332	Carbon 3.3K ohms 1/16W	C6	YWRVS1C220M	Electrolytic 22 μ F 16V
R199	ERJ3GEYJ101	Carbon 100 ohms 1/16W	C8	YWRVS1C470M	Electrolytic 47 μ F 16V
R200	ERJ3GEYJ103	Carbon 10K ohms 1/16W	C9	YGM1F104Z1ET	Ceramic 0.1 μ F 25V
R201	ERJ3GEYJ472	Carbon 4.7K ohms 1/16W	C12	YWRVS1C220M	Electrolytic 22 μ F 16V
R202	ERJ3GEYJ750	Carbon 75 ohms 1/16W	C13	YGM1F104Z1ET	Ceramic 0.1 μ F 25V
R211	ERJ3GEYJ103	Carbon 10K ohms 1/16W	C14	YWRVS1C470M	Electrolytic 47 μ F 16V
R212	ERJ3RHD822	Metal 8.2K ohms 1/16W	C15	YGM1F104Z1ET	Ceramic 0.1 μ F 25V
R213	ERJ3RHD433	Metal 43K ohms 1/16W	C16	YWRVS1C470M	Electrolytic 47 μ F 16V
R214-216	ERJ3GEY0R00	Carbon 0 ohm 1/16W	C17-19	YGM1F104Z1ET	Ceramic 0.1 μ F 25V
R501-525	ERJ3GEYJ472	Carbon 4.7K ohms 1/16W	C20	YWRVS1C470M	Electrolytic 47 μ F 16V
R526-528	ERJ3GEYJ104	Carbon 100K ohms 1/16W	C21-26	YGM1F104Z1ET	Ceramic 0.1 μ F 25V
R529	ERJ3GEYJ105	Carbon 1M ohms 1/16W	C27	YW5CH100J5VT	Ceramic 10 pF
R530	ERJ3GEYJ101	Carbon 100 ohms 1/16W	C28	YGM1F104Z1ET	Ceramic 0.1 μ F 25V
R531	ERJ3GEYJ104	Carbon 100K ohms 1/16W	C29	YW5CH102J5VT	Ceramic 1000 pF
R532	ERJ3GEYJ222	Carbon 2.2K ohms 1/16W	C30-33	YGM1F104Z1ET	Ceramic 0.1 μ F 25V
R533	ERJ3GEYJ101	Carbon 100 ohms 1/16W	C35	YWRVS1C220M	Electrolytic 22 μ F 16V
			C36	YGM1F104Z1ET	Ceramic 0.1 μ F 25V
			C37	YWRVS1C470M	Electrolytic 47 μ F 16V
			C38	YGM1F104Z1ET	Ceramic 0.1 μ F 25V
			C39	YW5CH150J5VT	Ceramic 15 pF

REF. NO.	PART NO.	DESCRIPTION	REF. NO.	PART NO.	DESCRIPTION
C41	YWRVS1C220M	Electrolytic 22 μ F 16V		YGM1C330J1HT	Ceramic 33 pF
C42,43	YGM1F104Z1ET	Ceramic 0.1 μ F 25V			for AW-RP501/B/G
C44	YWSK1C105KRA	Tantalum 1 μ F 16V	C89	YWRVS1C470M	Electrolytic 47 μ F 16V
C45	YGM1F104Z1ET	Ceramic 0.1 μ F 25V	C90,91	YWRVS1C220M	Electrolytic 22 μ F 16V
C46	YWRVS1C470M	Electrolytic 47 μ F 16V			
C47	YGM1F104Z1ET	Ceramic 0.1 μ F 25V	C93	YWCH511J5VT	Ceramic 510 pF
C48	YWRVJ1C221M	Electrolytic 220 μ F 16V	C94,95	YGM1F104Z1ET	Ceramic 0.1 μ F 25V
C49	YWRVS1E100M	Electrolytic 10 μ F 25V	C96	YW5CH471J5VT	Ceramic 470 pF
C50	YWRVS1C470M	Electrolytic 47 μ F 16V	C98	YGM1F104Z1ET	Ceramic 0.1 μ F 25V
C51	YWRVJ1C101M	Electrolytic 100 μ F 16V	C99	YGM1C330J1HT	Ceramic 33 pF 50V
C52	YGM1F104Z1ET	Ceramic 0.1 μ F 25V	C100	YGM1F104Z1ET	Ceramic 0.1 μ F 25V
C53	YW5CH680J5VT	Ceramic 68 pF	C101	YWRVJ1C101M	Electrolytic 100 μ F 16V
C54	YW5CH470J5VT	Ceramic 47 pF	C102	YWRVS1C220M	Electrolytic 22 μ F 16V
C55	YW5X103K5VT	Ceramic 0.01 μ F	C103	YWSK1C105KRA	Tantalum 1 μ F 16V
C56	YW5CH102J5VT	Ceramic 1000 pF	C104	YWRVJ1C221M	Electrolytic 220 μ F 16V
C57	YWRVS1E4R7M	Electrolytic 4.7 μ F 25V	C105	YWRVS1C220M	Electrolytic 22 μ F 16V
C58	YWRVS1C470M	Electrolytic 47 μ F 16V	C106	YWRVS1C470M	Electrolytic 47 μ F 16V
C59	YGM1F104Z1ET	Ceramic 0.1 μ F 25V	C107	YWRVP1E4R7M	Electrolytic 4.7 μ F 25V
C60	YW5X103K5VT	Ceramic 0.01 μ F	C108	YWRVS1C100M	Electrolytic 10 μ F 16V
C61	YWRVS1E4R7M	Electrolytic 4.7 μ F 25V	C109	YGM1C330J1HT	Ceramic 33 pF 50V
C62	YW5CH221J5VT	Ceramic 220 pF	C112	YWRVS1C100M	Electrolytic 10 μ F 16V
C63	YW5X152K5VT	Ceramic 1500 pF	C113	YGM1F104Z1ET	Ceramic 0.1 μ F 25V
C64	YW5X153K2VT	Ceramic 0.015 μ F	C114	YWRVS1C100M	Electrolytic 10 μ F 16V
C65	YWRVS1E4R7M	Ceramic 4.7 μ F 25V	C115	YWSK1C105KRA	Tantalum 1 μ F 16V
C66	YW5X103K5VT	Ceramic 0.01 μ F	C116	YWRVS1C100M	Electrolytic 10 μ F 16V
C67	YWRVS1C470M	Electrolytic 47 μ F 16V	C117	YWRVS1C470M	Electrolytic 47 μ F 16V
C68-70	YW5X103K5VT	Ceramic 0.01 μ F	C118	YWRVJ1C101M	Electrolytic 100 μ F 16V
C71	YWRVS1HR47M	Electrolytic 0.47 μ F 50V	C119	YW5CH200J5VT	Ceramic 20 pF
C72	YGM1F104Z1ET	Ceramic 0.1 μ F 25V	C120	YW5CH270J5VT	Ceramic 27 pF
C73	YWRVS1E4R7M	Electrolytic 4.7 μ F 25V	C121	YW5CH101J5VT	Ceramic 100 pF
C74	YGM1F104Z1ET	Ceramic 0.1 μ F 25V	C123	YW5CH040D5VT	Ceramic 4 pF
C75	YGM1C330J1HT	Ceramic 33 pF 50V	C124	YWRVS1C100M	Electrolytic 10 μ F 16V
		for AW-RP501/USA/Canada	C125-127	YGM1F104Z1ET	Ceramic 0.1 μ F 25V
	YW5CH101J5VT	Ceramic 100 pF	C128,130	YWRVS1C100M	Electrolytic 10 μ F 16V
		for AW-RP501/B/G	C131	YWRVS1C470M	Electrolytic 47 μ F 16V
C76	YW5CH620J5VT	Ceramic 62 pF	C132	YWRVS1C220M	Electrolytic 22 μ F 16V
		for AW-RP501/USA/Canada	C133	YW5CH100J5VT	Ceramic 10 pF
	YW5CH101J5VT	Ceramic 100 pF	C134,135	YWRVS1C220M	Electrolytic 22 μ F 16V
		for AW-RP501/B/G	C136	5F224Z1VT	Ceramic 0.22 μ F
C77	YGM1C330J1HT	Ceramic 33 pF 50V	C137	RVJ1C221M	Electrolytic 220 μ F 16V
		for AW-RP501/USA/Canada			
	YW5CH101J5VT	Ceramic 100 pF	C138	YWRVS1C220M	Electrolytic 22 μ F 16V
		for AW-RP501/B/G	C142	YGM1F104Z1ET	Ceramic 0.1 μ F 25V
C78	YGM1F104Z1ET	Ceramic 0.1 μ F 25V	C143	YWRVS1C470M	Electrolytic 47 μ F 16V
C79,80	YW5X103K5VT	Ceramic 0.01 μ F	C144	YGM1F104Z1ET	Ceramic 0.1 μ F 25V
			C145,146	YWRVS1C470M	Electrolytic 47 μ F 16V
C81,82	YGM1F104Z1ET	Ceramic 0.1 μ F 25V	C147	YWRVS1C220M	Electrolytic 22 μ F 16V
C85	YWRVS1C100M	Electrolytic 10 μ F 16V	C501-527	YGM1F104Z1ET	Ceramic 0.1 μ F 25V
C86	YGM1F104Z1ET	Ceramic 0.1 μ F 25V	C528	YWRVS0J220M	Electrolytic 22 μ F 6.3V
C87	YWRVP1HR47M	Electrolytic 0.47 μ F 50V	C529-532	YGM1F104Z1ET	Ceramic 25 V 0.1UF
C88	YW5CH620J5VT	Ceramic 62 pF	C533,534	YWCH220J5VT	Ceramic 22 pF
		for AW-RP501/USA/Canada			

REF. NO.	PART NO.	DESCRIPTION	REF. NO.	PART NO.	DESCRIPTION
C535	YGM1F105Z1AT	Ceramic 1 μ F 10V	FL3	YWCY4T139	Filter
C536	YWSK51A106MA	Tantalum 10 μ F 10V	FL4	CSB503F2	Filter
C537-540	YGM1F104Z1ET	Ceramic 0.1 μ F 25V	FL501	YWZJK5103-05	Noise Filter
C541	YWSK41C475KA	Tantalum 4.7 μ F 16V	E1	YWCP501YC01B	Wire
C542-544	YGM1F104Z1ET	Ceramic 0.1 μ F 25V	E2	YWCP501YC02B	Wire
C545,546	YWSK31D225MRA	Tantalum 2.2 μ F 20V			
C547	YWSK41C106MB	Tantalum 10 μ F 16V			
C548-550	YGM1F104Z1ET	Ceramic 0.1 μ F 25V			
C551,552	YWRVS1C100M	Electrolytic 10 μ F 16V			
C558,559	YGM1F104Z1ET	Ceramic 0.1 μ F 25V			
C564	YGM1F104Z1ET	Ceramic 0.1 μ F 25V			
C565	YWSK41C475KA	Tantalum 4.7 μ F 16V			
C566	YWSK41C106MB	Tantalum 10 μ F 16V			
C567	YW5CH101J5VT	Ceramic 100 pF			
C568	YWSK41C106MB	Tantalum 10 μ F 16V			
C570	YW5CH470J5VT	Ceramic 47 pF			
C571,572	YGM1F104Z1ET	Ceramic 0.1 μ F 25V			
C575-579	YGM1F104Z1ET	Ceramic 0.1 μ F 25V			
C593	YGM1F104Z1ET	Ceramic 0.1 μ F 25V			
C594-597	YW5CH101J5VT	Ceramic 100 pF			
X503	AXS628129P	IC Socket			
L1-4	YWNL321100J	Coil 10 μ H for AW-RP501/USA/Canada			
L1,4	YWNL321100J	Coil 10 μ H for AW-RP501/B/G			
L6,7	YWNL321100J	Coil 10 μ H			
L8-10	YWNL321390J	Coil 39 μ H			
L11	YWNL321150J	Coil 15 μ H			
P1	YW53261-0890	8-pin Connector			
P2	YW53261-1490	14-pin Connector			
P601	YW53261-0690	6-pin Connector			
P603	YW53261-0790	7-pin Connector			
P604	YW53261-1190	11-pin Connector			
P605	YW53261-1490	14-pin Connector			
P606	53261-1590	15-pin Connector			
P607	YW53261-1390	13-pin Connector			
P608	YW53261-1490	14-pin Connector			
P611	YW53261-0790	7-pin Connector			
Y1	YWUM14318VCO	Crystal Oscillator 14.3 MHz for AW-RP501/USA/Canada			
	YWUM17734VCO	Crystal Oscillator 17.7 MHz for AW-RP501/B/G			
Y501	YWAT5120MHZ	Crystal Oscillator 20 MHz			
FL1	YWCY4T140	Filter for AW-RP501/USA/Canada			
	YWCY4T139	Filter for AW-RP501/B/G			
FL2	YWCY4T138	Filter for AW-RP501/USA/Canada			
	YWCY4T140	Filter for AW-RP501/B/G			
			SW/CAM BOARD		
			PCB2 (RTL)	YWWRP51JKZ1A	Printed Circuit Board Assy
			U1	NJM2904M	IC
			U6-8	YWMC14051BF	IC
			U9	NJM2902M	IC
			U10	NJM2904M	IC
			U11	YWMC74HC32AF	IC
			U12	MC74HC125AF	IC
			U13	YWYMC14050BF	IC
			U14	YWNJM4556AM	IC
			U15	MC74HC132AF	IC
			U16,17	NJM2903M	IC
			U18	NJM2904M	IC
			U19	TL092CPS	IC
			U20	MN18888CUL	IC
			U21	YWMC14051BF	IC
			U22	YWM51957BFP	IC
			Q1-3	2SB1218QRS	Transistor
			Q4	2SB1218QRS	Transistor
			Q6,7	2SD1819QRS	Transistor
			Q8	2SB1219QRS	Transistor
			Q9	2SD1819QRS	Transistor
			Q11	2SB1218QRS	Transistor
			D1	MA142K	Diode
			D2	YWERB83004	Diode
			D3	MA142K	Diode

REF. NO.	PART NO.	DESCRIPTION		REF. NO.	PART NO.	DESCRIPTION	
D4	YWERB83004	Diode		R75	ERJ3GEYJ682	Carbon	6.8K ohms 1/16W
D5,6	MA143	Diode		R76	ERJ3GEYJ103	Carbon	10K ohms 1/16W
D7	MA142K	Diode		R77	ERJ3GEYJ203	Carbon	20K ohms 1/16W
D8	LN238RPH	LED		R78	ERJ3GEYJ471	Carbon	470 ohms 1/16W
D9,11	LN338GPH	LED		R79,80	ERJ3GEYJ153	Carbon	15K ohms 1/16W
D12	MA142K	Diode		R81	ERJ3GEYJ471	Carbon	470 ohms 1/16W
D13	MA143	Diode		R82	ERJ3GEYJ682	Carbon	6.8K ohms 1/16W
D14	MA142K	Diode		R83	ERJ3GEYJ103	Carbon	10K ohms 1/16W
D15	MA165	Diode		R84	ERJ3GEYJ203	Carbon	20K ohms 1/16W
D17,20	LN238RPH	LED		R85,87	ERJ3GEYJ103	Carbon	10K ohms 1/16W
R1	ERJ3GEYJ911	Carbon	910 ohms 1/16W	R90	ERJ3GEY0R00	Carbon	0 ohm 1/16W
R2	ERJ3GEYJ103	Carbon	10K ohms 1/16W	R91	ERJ3GEYJ473	Carbon	47K ohms 1/16W
R3	ERJ3GEYJ303	Carbon	30K ohms 1/16W	R92	ERJ3GEYJ101	Carbon	100 ohms 1/16W
R4	ERJ3GEYJ103	Carbon	10K ohms 1/16W	R95	ERJ3GEYJ473	Carbon	47K ohms 1/16W
R5	ERJ3GEYJ181	Carbon	180 ohms 1/16W	R96	ERJ3RHD202	Metal	2K ohms 1/16W
R6	ERJ3GEYJ203	Carbon	20K ohms 1/16W	R97	ERJ3RHD472	Metal	4.7K ohms 1/16W
R7	ERJ3GEYJ103	Carbon	10K ohms 1/16W	R98	ERJ3GEYJ510	Carbon	51 ohms 1/16W
R8	ERJ3GEYJ152	Carbon	1.5K ohms 1/16W	R99	ERJ3GEYJ473	Carbon	47K ohms 1/16W
R9	R9L11420K2	Variable Resistor	20K ohms	R100	ERJ3GEY0R00	Carbon	0 ohm 1/16W
R10	ERJ3GEYJ152	Carbon	1.5K ohms 1/16W	R101	ERJ3GEYJ473	Carbon	47K ohms 1/16W
R11-20	ERJ3GEYJ470	Carbon	47 ohms 1/16W	R102,103	ERJ3GEYJ221	Carbon	220 ohms 1/16W
R21,22	ERJ3GEYJ621	Carbon	620 ohms 1/16W	R106	ERJ3GEYJ102	Carbon	1K ohms 1/16W
R23,24	ERJ3GEYJ331	Carbon	330 ohms 1/16W	R107	ERJ3GEYJ104	Carbon	100K ohms 1/16W
R25-34	ERJ3GEYJ470	Carbon	47 ohms 1/16W	R108	ERJ3GEYJ101	Carbon	100 ohms 1/16W
R45,46	ERJ3GEYJ153	Carbon	15K ohms 1/16W	R109	ERJ3GEYJ473	Carbon	47K ohms 1/16W
R47	ERJ3GEYJ273	Carbon	27K ohms 1/16W	R110	ERJ3GEYJ391	Carbon	390 ohms 1/16W
R48	ERJ3GEYJ153	Carbon	15K ohms 1/16W	R111	ERJ3GEYJ911	Carbon	910 ohms 1/16W
R49	ERJ3GEYJ152	Carbon	1.5K ohms 1/16W	R112-117	ERJ3GEYJ331	Carbon	330 ohms 1/16W
R50	RK9D11320K	Variable Resistor	20K ohms	R118	ERJ3GEYJ102	Carbon	1K ohms 1/16W
R51	ERJ3GEYJ152	Carbon	1.5K ohms 1/16W	R119-122	ERJ3GEYJ104	Carbon	100K ohms 1/16W
R52	ERJ3GEYJ104	Carbon	100K ohms 1/16W	R123	ERJ3RHD103	Metal	10K ohms 1/16W
R53	ERJ3GEYJ473	Carbon	47K ohms 1/16W	R124	ERJ3RHD303	Metal	30K ohms 1/16W
R54	ERJ3GEYJ103	Carbon	10K ohms 1/16W	R125	ERJ3RHD103	Metal	10K ohms 1/16W
R55	ERJ3GEYJ104	Carbon	100K ohms 1/16W	R128,129	ERJ3GEY0R00	Carbon	0 ohm 1/16W
R56,57	ERJ3GEYJ153	Carbon	15K ohms 1/16W	R130	EXBLD8503G	Block Resistor	50K ohms 1/16W
R58	ERJ3GEYJ471	Carbon	470 ohms 1/16W	R131	ERJ3GEYJ101	Carbon	100 ohms 1/16W
R59	ERJ3GEYJ473	Carbon	47K ohms 1/16W	R135	ERJ3GEYJ153	Carbon	15K ohms 1/16W
R60	ERJ3GEYJ471	Carbon	470 ohms 1/16W	R136	YWRK9D11320K	Variable Resistor	20K ohms
R61	ERJ3GEYJ153	Carbon	15K ohms 1/16W	R137	ERJ3GEYJ153	Carbon	15K ohms 1/16W
R62	ERJ3GEYJ473	Carbon	47K ohms 1/16W	R138	ERJ3GEYJ203	Carbon	20K ohms 1/16W
R63	ERJ3GEYJ153	Carbon	15K ohms 1/16W	R139	YWRK9D11320K	Variable Resistor	20K ohms
R64	ERJ3GEYJ152	Carbon	1.5K ohms 1/16W	R140	ERJ3GEYJ562	Carbon	5.6K ohms 1/16W
R65	YWRK9D11320K	Variable Resistor	20K ohms	R141-143	ERJ3GEYJ102	Carbon	1K ohms 1/16W
R66,67	ERJ3GEYJ152	Carbon	1.5K ohms 1/16W	R144	ERJ3GEYJ272	Carbon	2.7K ohms 1/16W
R68	YWRK9D11310K	Variable Resistor	10K	R145	ERJ3RHD104	Metal	100K ohms 1/16W
R69	ERJ3GEYJ152	Carbon	1.5K ohms 1/16W	R146	ERJ3RHD302	Metal	3K ohms 1/16W
R70	ERJ3GEYJ153	Carbon	15K ohms 1/16W	R147	ERJ3RHD473	Metal	47K ohms 1/16W
R71	ERJ3GEYJ471	Carbon	470 ohms 1/16W	R148	ERJ3RHD302	Metal	3K ohms 1/16W
R72,73	ERJ3GEYJ153	Carbon	15K ohms 1/16W	R149	ERJ3RHD473	Metal	47K ohms 1/16W
R74	ERJ3GEYJ471	Carbon	470 ohms 1/16W	R150	ERJ3RHD104	Metal	100K ohms 1/16W

REF. NO.	PART NO.	DESCRIPTION		REF. NO.	PART NO.	DESCRIPTION	
R151-160	ERJ3GEYJ102	Carbon	1K ohms 1/16W	C31	YGM1F104Z1ET	Ceramic	0.1 μ F 25V
R161-167	ERJ3GEYJ473	Carbon	47K ohms 1/16W	C32	YWRVS1H1R0M	Electrolytic	1 μ F 50V
R168-171	ERJ3GEYJ272	Carbon	2.7K ohms 1/16W	C33,34	YGM1F104Z1ET	Ceramic	0.1 μ F 25V
R172	ERJ3GEYJ473	Carbon	47K ohms 1/16W	C35	YWRVS0J470M	Electrolytic	47 μ F 6.3V
R173	ERJ3GEYJ273	Carbon	27K ohms 1/16W	C36	YGM1F104Z1ET	Ceramic	0.1 μ F 25V
R175,176	ERJ3GEYJ102	Carbon	1K ohms 1/16W	C37-39	RVS0J470M	Electrolytic	47 μ F 6.3V
R177-180	ERJ3GEYJ473	Carbon	47K ohms 1/16W	C40,41	YGM1F104Z1ET	Ceramic	0.1 μ F 25V
R181,182	ERJ3RHD104	Metal	100K ohms 1/16W	C42-44	YW5CH101J5VT	Ceramic	100 pF
R183	ERJ3GEYJ472	Carbon	4.7K ohms 1/16W	C45	YWRVS1C470M	Electrolytic	47 μ F 16V
R184	ERJ3GEYJ273	Carbon	27K ohms 1/16W	C46	YWRVS0J470M	Electrolytic	47 μ F 6.3V
R185,187	ERJ3GEY0R00	Carbon	0 ohm 1/16W	C47	YW5CH101J5VT	Ceramic	100 pF
R188	ERJ3GEYJ472	Carbon	4.7K ohms 1/16W	C48	YWRVS0J101M	Electrolytic	100 μ F 6.3V
R190	ERJ3GEYJ103	Carbon	10K ohms 1/16W	C49,50	YGM1F104Z1ET	Ceramic	0.1 μ F 25V
R192	ERJ3GEYJ472	Carbon	4.7K ohms 1/16W	C51	YWRVP0J470M	Electrolytic	47 μ F 6.3V
R193	ERJ3RHD123	Metal	12K ohms 1/16W	C53	YW5CH101J5VT	Ceramic	100 pF
R194	ERJ3RHD472	Metal	4.7K ohms 1/16W	C54	YGM1B102K1HT	Ceramic	1000 pF 50V
R195	ERJ3GEYJ182	Carbon	1.8K ohms 1/16W	C55	YGM1F104Z1ET	Ceramic	0.1 μ F 25V
R196-199	ERJ3GEYJ473	Carbon	47K ohms 1/16W	C56	YWRVP1A330M	Electrolytic	33 μ F 10V
R202	ERJ3GEYJ153	Carbon	15K ohms 1/16W	C57,58	YWRVS0J470M	Electrolytic	47 μ F 6.3V
R203-205	ERJ3GEYJ473	Carbon	47K ohms 1/16W	C59	YWRVS1C470M	Electrolytic	47 μ F 16V
R206	ERJ3GEYJ470	Carbon	47 ohms 1/16W	C60,61	YW5CH151J5VT	Ceramic	150 pF
R207	ERJ3GEYJ272	Carbon	2.7K ohms 1/16W	C62	YWRVS0J470M	Electrolytic	47 μ F 6.3V
R211	ERJ3GEYJ473	Carbon	47K ohms 1/16W	C63	YWRVS0J101M	Electrolytic	100 μ F 6.3V
R212	ERJ3GEYJ153	Carbon	15K ohms 1/16W	C64-66	YGM1F104Z1ET	Ceramic	0.1 μ F 25V
R219	ERJ3GEYJ911	Carbon	910 ohms 1/16W	C67	YW5CH101J5VT	Ceramic	100 pF
R220	ERJ3GEY0R00	Carbon	0 ohm 1/16W	C68	YWRVS1C470M	Electrolytic	47 μ F 16V
R221,222	ERJ3GEYJ153	Carbon	15K ohms 1/16W	C69	YWRVS0J470M	Electrolytic	47 μ F 6.3V
R223	ERJ3GEY0R00	Carbon	0 ohm 1/16W	C71	YW5CH151J5VT	Ceramic	150 pF
C1-3	YWRVS0J470M	Electrolytic	47 μ F 6.3V	C72	YWSK41A476MC	Tantalum	47 μ F 10V
C4	YGM1F104Z1ET	Ceramic	0.1 μ F 25V	C73	YGM1F104Z1ET	Ceramic	0.1 μ F 25V
C5,6	YWRVS0J470M	Electrolytic	47 μ F 6.3V	C74,75	SK41A476MC	Tantalum	47 μ F 10V
C7	YGM1F104Z1ET	Ceramic	0.1 μ F 25V	C76	YGM1F104Z1ET	Ceramic	0.1 μ F 25V
C8	YWRVS1H1R0M	Electrolytic	1 μ F 50V	C77	YWRVJ1C221M	Electrolytic	220 μ F 16V
C9,10	YWRVS0J470M	Electrolytic	47 μ F 6.3V	C78	YGM1F104Z1ET	Ceramic	0.1 μ F 25V
C11	YGM1F104Z1ET	Ceramic	0.1 μ F 25V	C79	YWRVS1H1R0M	Electrolytic	1 μ F 50V
C12	YWRVS0J101M	Electrolytic	100 μ F 6.3V	C81	YGM1C330J1HT	Ceramic	33 pF 50V
C13	YWRVJ1C101M	Electrolytic	100 μ F 16V	C82	YWRVS1C470M	Electrolytic	47 μ F 16V
C14	YGM1F104Z1ET	Ceramic	0.1 μ F 25V	C85,86	YGM1F104Z1ET	Ceramic	0.1 μ F 25V
C15	YWRVJ1C101M	Electrolytic	100 μ F 16V	C87	YWSK1V104KRA	Tantalum	0.1 μ F 35V
C16	YWRVJ1E101M	Electrolytic	100 μ F 25V	C88-90	YWRVS0J470M	Electrolytic	47 μ F 6.3V
C17	YGM1F104Z1ET	Ceramic	0.1 μ F 25V	C91	YWRVS1H1R0M	Electrolytic	1 μ F 50V
C18	YWRVS0J101M	Electrolytic	100 μ F 6.3V	C92	YWRVJ1C221M	Electrolytic	220 μ F 16V
C19	YWRVJ1C101M	Electrolytic	100 μ F 16V	C93	SK31C476MRD0	Tantalum	47 μ F 16V
C20	YGM1F104Z1ET	Ceramic	0.1 μ F 25V	L1-3	YWNL32100J	Coil	10 μ H
C21	SK31C476MRD0	Tantalum	47 μ F 16V	L4	YWNL321R0J	Coil	1.0 μ H
C22	YWRVJ1E101M	Electrolytic	100 μ F 25V	SF1	YWSSFC2AT4	Current Fuse	2A
C23-25	YGM1F104Z1ET	Ceramic	0.1 μ F 25V	Y1	EFOGC8004A4	Resonator	
C26	YWRVS1H1R0M	Electrolytic	1 μ F 50V	S1-8	SSSF022P9N	Slide Switch	
C27,28	YGM1F104Z1ET	Ceramic	0.1 μ F 25V	S9-13	15EL1220000	Switch	
C29,30	YWRVS1H1R0M	Electrolytic	1 μ F 50V	S14	13AL0600040	Switch D	

REF. NO.	PART NO.	DESCRIPTION	REF. NO.	PART NO.	DESCRIPTION
S15	13AL0600050	Switch Y	JOYSTICK BOARD		
S16-20	15EL1220000	Switch	PCB4 (RTL) R1-3 R4-31 SW1-6 P1	YWWRP51JKY1A YWRKJXC10KB2 ERJ8GEY0R00 SSSS22211 YW53254-0710	Printed Circuit Board Assy Variable Resistor 10K ohms Carbon 0 ohm 1/16W Slide Switch Connector
S26,28	YWSSSF022P9N	Slide Switch			
S29	YWSSSF023P9N	Slide Switch			
S31,32	YWSKEVAC	Tact Switch			
S33	YWSSSF024P9N	Slide Switch			
S34	YWSSSF023P9N	Slide Switch			
S35	S2150	Rotary Switch	ACCESSARY PARTS/PACKAGING PARTS		
S36	YWSSSB022P6N	Slide Switch	M30	YWT050803	Polyethylene Bag
S37-39	13AL0600000	Switch	M38	YWT20X25C03	Polyethylene Bag
S40	YWSSSF022P6N	Slide Switch	M35	YWV22XPRB99S	Service Center List for AW-RP501/USA/Canada
P1	YWCP501SW01A	Wire	M31	YW1B1A466A	Joint Angle
P2	YWCP501SW02A	Wire	M32	YW7G1A653A	Label
P101	YWCP501SW03A	Wire	M33	YWPE26X40C05	Polyethylene Bag
P102	YWCP501SW04A	Wire	M34	YW7J1A077A	Operating Instructions for AW-RP501/USA/Canada
P103	YW53254-0210	Connector		YW7J1A078A	Operating Instructions for AW-RP501B/G
P104	YWCP501SW05A	Wire	M37	YWA5PA0074A3	Rack Angle
P105	YWCP501SW06A	Wire	M39	XZB35X50C05	Polyethylene Bag
P106	YWCP501SW07A	Wire	M40	YW0C1A009AA	Packaging Ass'y
P107	YWCP501SW08A	Wire	M41	YWV8FA0070A4	Packaging Label
P108	YW53261-0890	Connector	M42	YWV8FA0137A4	Packaging Label for AW-RP501/USA/Canada
E1	YWL3071A02A5	Cable		YWV8FA0140A4	Packaging Label for AW-RP501B/G
E2	YWCP501SW09A	Wire			
M11	YWLH57	Spacer			
REAR BOARD					
PCB3 (RTL)	YWWRP51JKY2A	Printed Circuit Board Assy			
R1,2	ERDS2TJ750	Carbon 75 ohms 1/4W			
R3,4	EROS2CKF75R0	Metal 75 ohms 1/4W			
R6-8	ERDS2TJ750	Carbon 75 ohms 1/4W			
C1-8	ECKF1E103ZV	Ceramic 0.01 μF 25V			
C9-16	400103XKT	Ceramic 0.01 μF			
P1	ML40S1CX2P	2-pin Terminal			
P2	285D9880J101	Jack			
P3	YWM1824	Connector			
P5	YWM0092	8-pin DIN Connector			
P6	YWP2324B	BNC Connector			
P7	YWP2243	Connector			
P101	YWCP501RE01A	Wire			
P102	YWCP501RE02A	Wire			
P103	YWCP501RE03A	Wire			
P105	YWCP501RE04A	Wire			

REF. NO.	PART NO.	DESCRIPTION	REF. NO.	PART NO.	DESCRIPTION
AW-RP505			MAIN BOARD		
MISCELLANEOUS			PCB1 (RTL)	YWWRP55JKZ2A	Printed Circuit Board Assy
U101	YWNJM7809FA	IC	U13	YWNJM2267M	IC
U102	YWNJM7805FA	IC	U501,502	MC74HC240AF	IC
U103	YWNJM7809FA	IC	U504	YWHM6264BLFP	IC
U104	YWNJM7805FA	IC	U505	KL5C8012CFP	IC
U105	HN27C256AFP	Memory Device (ROM)	U506	SN74LS04NS	IC
J101	HEC075701003	DC Jack	U507	MC74HC244AF	IC
CN101	YWM0092	8-pin DIN Connector	U508	SN74LS04NS	IC
CN102	AXS62822	IC Socket Guide	U509	YWTD62083F	IC
E101	ML40S1CXS6P	6-pin Terminal	U510	YWTL7705CPS	IC
E102	YWCP501CP01B	Wire	U512	YWTD62083F	IC
E103	YWCP501CP02B	Wire	U513	YWSN75179BPS	IC
E104	YWCP501CP03B	Wire	U514	MC74HC4051F	IC
E105	YWCP501CP03B	Wire	U515	YWADS7806U	IC
E106	YWCP501CP04B	Wire	U516	NJM2904M	IC
M1	YW1B1A465A	Joystick Angle	U517	PTFPGA1	IC
M2	YVV5RA0278A4	Joystick Knob	U518,519	SN74ALS273NS	IC
M3	YW2Y1A021A	Joystick Collar	U520,521	YWTD62083F	IC
M4	YW5N1A022A	Joystick Cover	U522	YW78L05UATE2	IC
M6	YW1A1A057B	Cover	U530	YWSN75179BPS	IC
M7	YW2R1A015A	Iris Knob	U531	TC74HC123AF	IC
M8	YWTD446MR07A	Button Guide	U532	MC74HC165F	IC
M9	YWA6JG0016B3	Button (WHT)	U533	YWTD62083F	IC
M10	YWA6JC0017A4	Button Guide (N4)	U534	MC74HC04AF	IC
M12	YW5E1A017A	Switch Cushion (A)	Q43	2SD1819QRS	Transistor
M13	YW5E1A018A	Switch Cushion (B)	Q44	2SC3931-CD	Transistor
M14	YWWLS160	Locking Spacer	Q45	2SD1819QRS	Transistor
M15	YW2Y1A022A	Spacer	D501	MA142K	Diode
M17	YW1A1A054A	Chassis	R193	ERJ3GEYJ154	Carbon 150K ohms 1/16W
M18	SJ-5003	Rubber Foot	R194	ERJ3GEYJ104	Carbon 100K ohms 1/16W
M19	YW1A1A065A	Blank Panel	R195	ERJ3GEYJ332	Carbon 3.3K ohms 1/16W
M20	YW1A1A061A	Rear Panel	R196	ERJ3GEYJ222	Carbon 2.2K ohms 1/16W
M21	YVV2GA0065A4	Cord Clamp	R197,198	ERJ3GEYJ332	Carbon 3.3K ohms 1/16W
M23	△ YW7C1A025A	Main Label for AW-RP505/USA/Canada	R199	ERJ3GEYJ101	Carbon 100 ohms 1/16W
	YW7C1A026A	Main Label for AW-RP505/B/G	R200	ERJ3GEYJ103	Carbon 10K ohms 1/16W
M24	△ YVV7MA0061A4	FCC Label for AW-RP505/USA/Canada	R201	ERJ3GEYJ472	Carbon 4.7K ohms 1/16W
M25	△ YVV7MA1009A4	EXT DC Label	R202	ERJ3GEYJ750	Carbon 75 ohms 1/16W
M26	△ YVV7MB0099A4	Screw Caution Label	R501-525	ERJ3GEYJ472	Carbon 4.7K ohms 1/16W
M27	△ YVV7MA0338A4	See Manual Label	R526-528	ERJ3GEYJ104	Carbon 100K ohms 1/16W
			R529	ERJ3GEYJ105	Carbon 1M ohms 1/16W
			R530	ERJ3GEYJ101	Carbon 100 ohms 1/16W
			R531	ERJ3GEYJ104	Carbon 100K ohms 1/16W
			R532	ERJ3GEYJ222	Carbon 2.2K ohms 1/16W
			R533	ERJ3GEYJ101	Carbon 100 ohms 1/16W
			R534	ERJ3GEYJ201	Carbon 200 ohms 1/16W

REF. NO.	PART NO.	DESCRIPTION
R535	ERJ3GEYJ333	Carbon 33K ohms 1/16W
R547	ERJ3GEYJ201	Carbon 200 ohms 1/16W
R548-562	ERJ3GEYJ201	Carbon 200 ohms 1/16W
R563	ERJ3GEY0R00	Carbon 0 ohm 1/16W
R564	ERJ3GEYJ201	Carbon 200 ohms 1/16W
R570-589	ERJ3GEYJ201	Carbon 200 ohms 1/16W
R590-612	ERJ3GEYJ472	Carbon 4.7K ohms 1/16W
R613-630	ERJ3GEYJ201	Carbon 200 ohms 1/16W
R631	ERJ3GEYJ273	Carbon 27K ohms 1/16W
R632,633	ERJ3GEY0R00	Carbon 0 ohm 1/16W
R634	ERJ3GEYJ201	Carbon 200 ohms 1/16W
R646,647	ERJ3GEYJ203	Carbon 20K ohms 1/16W
R648-652	ERJ3GEYJ473	Carbon 47K ohms 1/16W
R653,654	ERJ3GEYJ201	Carbon 200 ohms 1/16W
R655,656	ERJ3GEYJ680	Carbon 68 ohms 1/16W
R657	ERJ3GEY0R00	Carbon 0 ohm 1/16W
R901-903	ERJ6GEY0R00	Carbon 0 ohm 1/10W
C131	YWRVS1C470M	Electrolytic 47 µF 16V
C132	YWRVS1C220M	Electrolytic 22 µF 16V
C133	YW5CH100J5VB	Ceramic 10 pF
C134,135	YWRVS1C220M	Electrolytic 22 µF 16V
C136	YW5F224Z1VB	Ceramic 0.22 µF
C137	YWRVJ1C221M	Electrolytic 220 µF 16V
C138	YWRVS1C220M	Electrolytic 22 µF 16V
C501-527	YGM1F104Z1ET	Ceramic 0.1 µF 25V
C528	YWRVS0J220M	Electrolytic 22 µF 6.3V
C529-532	YGM1F104Z1ET	Ceramic 0.1 µF 25V
C533,534	YW5CH220J5VB	Ceramic 22 pF
C535	YGM1F105Z1AT	Ceramic 1 µF 10V
C536	YWSK51A106MA	Tantalum 10 µF 10V
C537-540	YGM1F104Z1ET	Ceramic 0.1 µF 25V
C541	YWSK41C475KA	Tantalum 4.7 µF 16V
C542-544	YGM1F104Z1ET	Ceramic 0.1 µF 25V
C545,546	YWSK31D225MRA	Tantalum 2.2 µF 20V
C547	YWSK41C106MB	Tantalum 10 µF 16V
C548-550	YGM1F104Z1ET	Ceramic 0.1 µF 25V
C551,552	YWRVS1C100M	Electrolytic 10 µF 16V
C558-560	YGM1F104Z1ET	Ceramic 0.1 µF 25V
C565	YWSK41C475KA	Tantalum 4.7 µF 16V
C566	YWSK41C106MB	Tantalum 10 µF 16V
C567	YW5CH101J5VT	Ceramic 100 pF
C568	YWSK41C106MB	Tantalum 10 µF 16V
C570	YW5CH470J5VT	Ceramic 47 pF
C571-573	YGM1F104Z1ET	Ceramic 0.1 µF 25V
C574	YW5X103K5VT	Ceramic 0.01 µF
C575-579	YGM1F104Z1ET	Ceramic 0.1 µF 25V
C590-593	YGM1F104Z1ET	Ceramic 0.1 µF 25V
CN101	AXS628129P	IC Socket
P2	YW53261-1490	14-pin Connector
P601	YW53261-0690	6-pin Connector

REF. NO.	PART NO.	DESCRIPTION
P603	YW53261-0790	7-pin Connector
P604	YW53261-1190	11-pin Connector
P605	YW53261-1490	14-pin Connector
P606	YW53261-1590	15-pin Connector
P607	YW53261-1390	13-pin Connector
P608	YW53261-1490	14-pin
P611	YW53261-0790	7-pin Connector
Y501	YWAT5120MHZ	Crystal Oscillator 20 MHz
FL501	YWZJK5103-05	Noise Filter
E1	YWCP501YC01B	Wire
E2	YWCP501YC02B	Wire
SW/CAM BOARD		
PCB2 (RTL)	YWWRP55JKZ2A	Printed Circuit Board Assy
U1	NJM2904M	IC
U6-8	YWMC14051BF	IC
U9	NJM2902M	IC
U10	NJM2904M	IC
U11	YWMC74HC32AF	IC
U12	MC74HC125AF	IC
U13	YWYMC14050BF	IC
U14	YWNJM4556AM	IC
U15	MC74HC132AF	IC
U16,17	NJM2903M	IC
U18	NJM2904M	IC
U20	MN18888CUL	IC
U21	YWMC14051BF	IC
U22	YWM51957BFP	IC
Q1	2SB1218QRS	Transistor
Q2,3	2SD1819QRS	Transistor
Q4,5	2SB1218QRS	Transistor
Q6,7	2SD1819QRS	Transistor
Q8	2SB1219QRS	Transistor
Q9	2SD1819QRS	Transistor
Q10-13	2SB1218QRS	Transistor
D1	MA142K	Diode
D2	YWERB83004	Diode
D3	MA142K	Diode

REF. NO.	PART NO.	DESCRIPTION	REF. NO.	PART NO.	DESCRIPTION
D4	ERB83004	Diode	R72,73	ERJ3GEYJ153	Carbon 15K ohms 1/16W
D5,6	MA143	Diode	R74	ERJ3GEYJ471	Carbon 470 ohms 1/16W
D7	MA142K	Diode	R75	ERJ3GEYJ682	Carbon 6.8K ohms 1/16W
D8	LN238RPH	LED	R76	ERJ3GEYJ103	Carbon 10K ohms 1/16W
D9,11	LN338GPH	LED	R77	ERJ3GEYJ203	Carbon 20K ohms 1/16W
D12	MA142K	Diode	R78	ERJ3GEYJ471	Carbon 470 ohms 1/16W
D13	MA143	Diode	R79,80	ERJ3GEYJ153	Carbon 15K ohms 1/16W
D14	MA142K	Diode	R81	ERJ3GEYJ471	Carbon 470 ohms 1/16W
D15	MA165	Diode	R82	ERJ3GEYJ682	Carbon 6.8K ohms 1/16W
D16-21	LN238RPH	LED	R83	ERJ3GEYJ103	Carbon 10K ohms 1/16W
R1	ERJ3GEYJ911	Carbon 910 ohms 1/16W	R84	ERJ3GEYJ203	Carbon 20K ohms 1/16W
R2	ERJ3GEYJ103	Carbon 10K ohms 1/16W	R85,87	ERJ3GEYJ103	Carbon 10K ohms 1/16W
R3	ERJ3GEYJ303	Carbon 30K ohms 1/16W	R90	ERJ3GEY0R00	Carbon 0 ohm 1/16W
R4	ERJ3GEYJ103	Carbon 10K ohms 1/16W	R91	ERJ3GEYJ473	Carbon 47K ohms 1/16W
R5	ERJ3GEYJ181	Carbon 180 ohms 1/16W	R92	ERJ3GEYJ101	Carbon 100 ohms 1/16W
R6	ERJ3GEYJ203	Carbon 20K ohms 1/16W	R95	ERJ3GEYJ473	Carbon 47K ohms 1/16W
R7	ERJ3GEYJ103	Carbon 10K ohms 1/16W	R96	ERJ3RHD202	Metal 2K ohms 1/16W
R8	ERJ3GEYJ152	Carbon 1.5K ohms 1/16W	R97	ERJ3RHD472	Metal 4.7K ohms 1/16W
R9	YWR9L11420K2	Variable Resistor 20K ohms	R98	ERJ3GEYJ510	Carbon 51 ohms 1/16W
R10	ERJ3GEYJ152	Carbon 1.5K ohms 1/16W	R99	ERJ3GEYJ473	Carbon 47K ohms 1/16W
R11-20	ERJ3GEYJ470	Carbon 47 ohms 1/16W	R100	ERJ3GEY0R00	Carbon 0 ohm 1/16W
R21,22	ERJ3GEYJ621	Carbon 620 ohms 1/16W	R101	ERJ3GEYJ473	Carbon 47K ohms 1/16W
R23,24	ERJ3GEYJ331	Carbon 330 ohms 1/16W	R102,103	ERJ3GEYJ221	Carbon 220 ohms 1/16W
R25-34	ERJ3GEYJ470	Carbon 47 ohms 1/16W	R106	ERJ3GEYJ102	Carbon 1K ohms 1/16W
R35-44	ERJ3GEYJ331	Carbon 330 ohms 1/16W	R107	ERJ3GEYJ104	Carbon 100K ohms 1/16W
R45,46	ERJ3GEYJ153	Carbon 15K ohms 1/16W	R108	ERJ3GEYJ101	Carbon 100 ohms 1/16W
R47	ERJ3GEYJ273	Carbon 27K ohms 1/16W	R109	ERJ3GEYJ473	Carbon 47K ohms 1/16W
R48	ERJ3GEYJ153	Carbon 15K ohms 1/16W	R110	ERJ3GEYJ391	Carbon 390 ohms 1/16W
R49	ERJ3GEYJ152	Carbon 1.5K ohms 1/16W	R111	ERJ3GEYJ911	Carbon 910 ohms 1/16W
R50	YWRK9D11320K	Variable Resistor 20K ohms	R112-117	ERJ3GEYJ331	Carbon 330 ohms 1/16W
R51	ERJ3GEYJ152	Carbon 1.5K ohms 1/16W	R118	ERJ3GEYJ102	Carbon 1K ohms 1/16W
R52	ERJ3GEYJ104	Carbon 100K ohms 1/16W	R119-122	ERJ3GEYJ104	Carbon 100K ohms 1/16W
R53	ERJ3GEYJ473	Carbon 47K ohms 1/16W	R123	ERJ3RHD103	Metal 10K ohms 1/16W
R54	ERJ3GEYJ103	Carbon 10K ohms 1/16W	R124	ERJ3RHD303	Metal 30K ohms 1/16W
R55	ERJ3GEYJ104	Carbon 100K ohms 1/16W	R125	ERJ3RHD103	Metal 10K ohms 1/16W
R56,57	ERJ3GEYJ153	Carbon 15K ohms 1/16W	R128,129	ERJ3GEY0R00	Carbon 0 ohm 1/16W
R58	ERJ3GEYJ471	Carbon 470 ohms 1/16W	R130	EXBLD8503G	Block Resistor 50K ohms 1/16W
R59	ERJ3GEYJ473	Carbon 47K ohms 1/16W	R131	ERJ3GEYJ101	Carbon 100 ohms 1/16W
R60	ERJ3GEYJ471	Carbon 470 ohms 1/16W	R132	ERJ3GEYJ473	Carbon 47K ohms 1/16W
R61	ERJ3GEYJ153	Carbon 15K ohms 1/16W	R133	ERJ3GEYJ153	Carbon 15K ohms 1/16W
R62	ERJ3GEYJ473	Carbon 47K ohms 1/16W	R134	ERJ3GEYJ911	Carbon 910 ohms 1/16W
R63	ERJ3GEYJ153	Carbon 15K ohms 1/16W	R141-143	ERJ3GEYJ102	Carbon 1K ohms 1/16W
R64	ERJ3GEYJ152	Carbon 1.5K ohms 1/16W	R144	ERJ3GEYJ272	Carbon 2.7K ohms 1/16W
R65	YWRK9D11320K	Variable Resistor 20K ohms	R145	ERJ3RHD104	Metal 100K ohms 1/16W
R66	ERJ3GEYJ152	Carbon 1.5K ohms 1/16W	R146	ERJ3RHD302	Metal 3K ohms 1/16W
R67	ERJ3GEYJ152	Carbon 1.5K ohms 1/16W	R147	ERJ3RHD473	Metal 47K ohms 1/16W
R68	YWRK9D11310K	Variable Resistor 10K ohms	R148	ERJ3RHD302	Metal 3K ohms 1/16W
R69	ERJ3GEYJ152	Carbon 1.5K ohms 1/16W	R149	ERJ3RHD473	Metal 47K ohms 1/16W
R70	ERJ3GEYJ153	Carbon 15K ohms 1/16W	R150	ERJ3RHD104	Metal 100K ohms 1/16W
R71	ERJ3GEYJ471	Carbon 470 ohms 1/16W	R151-160	ERJ3GEYJ102	Carbon 1K ohms 1/16W

REF. NO.	PART NO.	DESCRIPTION		REF. NO.	PART NO.	DESCRIPTION	
R161-167	ERJ3GEYJ473	Carbon	47K ohms 1/16W	C21	SK31C476MRD0	Tantalum	47 μ F 16V
R168-171	ERJ3GEYJ272	Carbon	2.7K ohms 1/16W	C22	YWRVJ1E101M	Electrolytic	100 μ F 25V
R172	ERJ3GEYJ473	Carbon	47K ohms 1/16W	C23-25	YGM1F104Z1ET	Ceramic	0.1 μ F 25V
R173	ERJ3GEYJ273	Carbon	27K ohms 1/16W	C26	YWRVS1H1R0M	Electrolytic	1 μ F 50V
R175,176	ERJ3GEYJ102	Carbon	1K ohms 1/16W	C27,28	YGM1F104Z1ET	Ceramic	0.1 μ F 25V
R177-180	ERJ3GEYJ473	Carbon	47K ohms 1/16W	C29,30	YWRVS1H1R0M	Electrolytic	1 μ F 50V
R181,182	ERJ3RHD104	Metal	100K ohms 1/16W	C31	YGM1F104Z1ET	Ceramic	0.1 μ F 25V
R183	ERJ3GEYJ472	Carbon	4.7K ohms 1/16W	C32	YWRVS1H1R0M	Electrolytic	1 μ F 50V
R184	ERJ3GEYJ273	Carbon	27K ohms 1/16W	C33,34	YGM1F104Z1ET	Ceramic	0.1 μ F 25V
R185,187	ERJ3GEY0R00	Carbon	0 ohm 1/16W	C35	YWRVS0J470M	Electrolytic	47 μ F 6.3V
R188	ERJ3GEYJ472	Carbon	4.7K ohms 1/16W	C36	YGM1F104Z1ET	Ceramic	0.1 μ F 25V
R190	ERJ3GEYJ103	Carbon	10K ohms 1/16W	C37-39	YWRVS0J470M	Electrolytic	47 μ F 6.3V
R192	ERJ3GEYJ472	Carbon	4.7K ohms 1/16W	C40,41	YGM1F104Z1ET	Ceramic	0.1 μ F 25V
R193	ERJ3RHD123	Metal	12K ohms 1/16W	C42-44	YW5CH101J5VT	Ceramic	100 pF
R194	ERJ3RHD472	Metal	4.7K ohms 1/16W	C45	YWRVS1C470M	Electrolytic	47 μ F 16V
R195	ERJ3GEYJ182	Carbon	1.8K ohms 1/16W	C46	YWRVS0J470M	Electrolytic	47 μ F 6.3V
R196-199	ERJ3GEYJ473	Carbon	47K ohms 1/16W	C47	YW5CH101J5VT	Ceramic	100 pF
R202	ERJ3GEYJ153	Carbon	15K ohms 1/16W	C48	YWRVS0J101M	Electrolytic	100 μ F 6.3V
R203-205	ERJ3GEYJ473	Carbon	47K ohms 1/16W	C49,50	YGM1F104Z1ET	Ceramic	0.1 μ F 25V
R206	ERJ3GEYJ470	Carbon	47 ohms 1/16W	C51	YWRVP0J470M	Electrolytic	47 μ F 6.3V
R207	ERJ3GEYJ272	Carbon	2.7K ohms 1/16W	C53	YW5CH101J5VT	Ceramic	100 pF
R208	ERJ3GEYJ911	Carbon	910 ohms 1/16W	C54	YGM1B102K1HT	Ceramic	1000 pF 50V
R209	ERJ3GEYJ473	Carbon	47K ohms 1/16W	C55	YGM1F104Z1ET	Ceramic	0.1 μ F 25V
R210	ERJ3GEYJ153	Carbon	15K ohms 1/16W	C56	YWRVP1A330M	Electrolytic	33 μ F 10V
R211	ERJ3GEYJ473	Carbon	47K ohms 1/16W	C57,58	YWRVS0J470M	Electrolytic	47 μ F 6.3V
R212	ERJ3GEYJ153	Carbon	15K ohms 1/16W	C59	YWRVS1C470M	Electrolytic	47 μ F 16V
R213	ERJ3GEYJ911	Carbon	910 ohms 1/16W	C60,61	YW5CH151J5VT	Ceramic	150 pF
R214	ERJ3GEYJ473	Carbon	47K ohms 1/16W	C62	YWRVS0J470M	Electrolytic	47 μ F 6.3V
R215	ERJ3GEYJ153	Carbon	15K ohms 1/16W	C63	YWRVS0J101M	Electrolytic	100 μ F 6.3V
R216	ERJ3GEYJ911	Carbon	910 ohms 1/16W	C64	YGM1F104Z1ET	Ceramic	0.1 μ F 25V
R217	ERJ3GEYJ473	Carbon	47K ohms 1/16W	C67	YW5CH101J5VT	Ceramic	100 pF
R218	ERJ3GEYJ153	Carbon	15K ohms 1/16W	C68	YWRVS1C470M	Electrolytic	47 μ F 16V
R219	ERJ3GEYJ911	Carbon	910 ohms 1/16W	C69	YWRVS0J470M	Electrolytic	47 μ F 6.3V
R221,222	ERJ3GEYJ153	Carbon	15K ohms 1/16W	C71	YW5CH151J5VT	Ceramic	150 pF
C1-3	YWRVS0J470M	Electrolytic	47 μ F 6.3V	C72	YWSK41A476MC	Tantalum	47 μ F 10V
C4	YGM1F104Z1ET	Ceramic	0.1 μ F 25V	C73	YGM1F104Z1ET	Ceramic	0.1 μ F 25V
C5,6	YWRVS0J470M	Electrolytic	47 μ F 6.3V	C74,75	YWSK41A476MC	Tantalum	47 μ F 10V
C7	YGM1F104Z1ET	Ceramic	0.1 μ F 25V	C76	YGM1F104Z1ET	Ceramic	0.1 μ F 25V
C8	YWRVS1H1R0M	Electrolytic	1 μ F 50V	C77	RVJ1C221M	Electrolytic	220 μ F 16V
C9,10	YWRVS0J470M	Electrolytic	47 μ F 6.3V	C78	YGM1F104Z1ET	Ceramic	0.1 μ F 25V
C11	YGM1F104Z1ET	Ceramic	0.1 μ F 25V	C79	YWRVS1H1R0M	Electrolytic	1 μ F 50V
C12	YWRVS0J101M	Electrolytic	100 μ F 6.3V	C81	YGM1C330J1HT	Ceramic	33 pF 50V
C13	YWRVJ1C101M	Electrolytic	100 μ F 16V	C82	YWRVS1C470M	Electrolytic	47 μ F 16V
C14	YGM1F104Z1ET	Ceramic	0.1 μ F 25V	C85,86	YGM1F104Z1ET	Ceramic	0.1 μ F 25V
C15	YWRVJ1C101M	Electrolytic	100 μ F 16V	C87	YWSK1V104KRA	Tantalum	0.1 μ F 35V
C16	YWRVJ1E101M	Electrolytic	100 μ F 25V	C88-90	YWRVS0J470M	Electrolytic	47 μ F 6.3V
C17	YGM1F104Z1ET	Ceramic	0.1 μ F 25V	C91	YWRVS1H1R0M	Electrolytic	1 μ F 50V
C18	YWRVS0J101M	Electrolytic	100 μ F 6.3V	C92	YWRVJ1C221M	Electrolytic	220 μ F 16V
C19	RVJ1C101M	Electrolytic	100 μ F 16V	C93	SK31C476MRD0	Tantalum	47 μ F 16V
C20	YGM1F104Z1ET	Ceramic	0.1 μ F 25V	L1-3	YWNL32100J	Coil	10 μ H

REF. NO.	PART NO.	DESCRIPTION
L4	YWNL321R0J	Coil 1.0 μ H
S1-8	SSSF022P9N	Slide Switch
S9-13	15EL1220000	Switch
S14	13AL0600040	Switch D
S15	13AL0600050	Switch Y
S16-20	15EL1220000	Switch
S21-25	13AL0600000	Switch
S26,28	SSSF022P9N	Slide Switch
S29	SSSF023P9N	Slide Switch
S30	SSSF022P9N	Slide Switch
S31,32	YWSKEVAC	Tact Switch
S33	SSSF024P9N	Slide Switch
S34	SSSF023P9N	Slide Switch
S35	YWS2150	Rotary Switch
S36	SSSB022P6N	Slide Switch
S37-39	13AL0600000	Switch
S40	SSSF022P6N	Slide Switch
P2	YWCP501SW02A	Wire
P101	YWCP501SW03A	Wire
P102	YWCP501SW04A	Wire
P103	53254-0210	Connector
P104	YWCP501SW05A	Wire
P105	YWCP501SW06A	Wire
P106	YWCP501SW07A	Wire
P107	YWCP501SW08A	Wire
P108	53261-0890	Connector
SF1 Δ	YWSSFC2AT4	Current Fuse 2A
Y1	EFOGC8004A4	Resonator
E1	YWL3071A02A5	Cable
E2	YWCP501SW09A	Wire
M11	YWLH57	Spacer
REAR BOARD		
PCB3 (RTL)	YWWRP55JKY2A	Printed Circuit Board Assy
R1,2	ERDS2TJ750	Carbon 75 ohms 1/4W
R5	ERDS2T0	Carbon 0 ohm 1/4W
R6	ERDS2TJ750	Carbon 75 ohms 1/4W
C1-8	ECKF1E103ZV	Ceramic 0.01 μ F 25V
C9-20	400103XKT	Ceramic 0.01 μ F
P1	ML40S1CX6P	6-pin Terminal
P2	285D9880J101	Jack
P5	YWM0092	8-pin DIN Connector
P6	YWP2324B	BNC Connector

REF. NO.	PART NO.	DESCRIPTION
P7	YWP2262	BNC Connector
P101	YWCP505RE01A	Wire
P102	YWCP505RE02A	Wire
P103	YWCP505RE03A	Wire
P105	YWCP501RE04A	Wire
JOYSTICK BOARD		
PCB4 (RTL)	YWWRP51JKY1A	Printed Circuit Board Assy
R1-3	YWRKJXC10KB2	Variable Resistor 10K ohms
R4-31	ERJ8GEY0R00	Carbon 0 ohm 1/16W
SW1-6	SSSS22211	Slide Switch
P1	YW53254-0710	7-pin Connector
ACCESSARY PARTS/PACKAGING PARTS		
M30	YWT050803	Polyethylene Bag
M31	YW1B1A466A	Joint Angle
M32	YW7G1A653A	Label
M33	YWPE26X40C05	Polyethylene Bag
M34 Δ	YW7J1A077A	Operating Instructions for AW-RP505/USA/Canada
M35	YW7J1A078A YVW22XPRB99S	Operating Instructions for AW-RP505/B/G Service Center List for AW-RP501/USA/Canada
M37	YWA5PA0074A3	Rack Angle
M38	YWT20X25C03	Polyethylene Bag
M39	XZB35X50C05	Polyethylene Bag
M40	YW0C1A009AA	Packaging Ass'y
M41	YVW8FA0137A4	Packaging Label for AW-RP501/USA/Canada
M42	YVW8FA0140A4 YVW8FA0070A4	Packaging Label for AW-RP505/B/G Packaging Label